

VOCO
Material-Safety Data Sheet (Directive 91/155/EEC)

1	<u>Names of Material, Preparation and Company</u>			
	trade name:	Grandio		
	manufacturer/supplier	VOCO GmbH	Tel.:	+49-4721/71 9 - 0
	address:	Anton-Flettner-Str. 1-3 D - 27472 Cuxhaven	Fax:	+49-4721/71 9 - 109
	information sector:	Scientific Department	Tel.:	+49-47 21/71 9 - 0
	emergency information:	Scientific Department	emergency call:	+49-47 21/71 9 - 0
2	<u>Composition/Details on Components</u>			
	preparation:	mixture of diff. dimethacrylates, silicate fillers, initiators, pigments, amines, additives		
	description:	light-curing nanohybrid composite for fillings of all classes incl. inlays/onlays		
	hazardous ingredients:			
	name	CAS-No.	content	danger symbol R-categories
	UDMA	41137-60-4	12-14 %	Xi 36-38
	BIS-GMA	1565-94-2	10-12 %	Xi 36-38
3	<u>Possible Risks</u>			
	designation of risk:	Xi, irritant		
	special details of risk (R-categories):	36/37/38		
	detrimental effects/symptoms:	irritant in case of eye, skin and respiratory contact		
4	<u>First-Aid-Measures</u>			
	general information:			
	after inhalation:	fresh air, in case of indisposition or nausea contact a doctor		
	after skin contact:	rinse thoroughly with plenty of water		
	after eye contact:	rinse thoroughly with water, contact a doctor		
	after swallowing:	contact immediately a physician		
	information for the attending physician:	material for dental or laboratory use only		
5	<u>Fire Fighting Measures</u>			
	suitable fire extinguishing agents:	foam, carbon dioxide, powder fire extinguishers		
	unsuitable fire extinguishing agents:	water		
	particular hazards:	none		
	fire fighting protective equipment:	no data available		
6	<u>Measures in Case of Unintended Release</u>			
	measures related to persons:	avoid eye and/or skin contact		
	environmental measures:	do not let the material get in contact with sewerage systems		
	procedures of cleaning/uptake	take up mechanically, use common absorbents		
	additional information:	none		
7.	<u>Handling and Storage</u>			
7.1	handling: only by qualified staff in dental offices or dental laboratories			
	instructions for safe handling:	see instructions for use		
	instructions on fire and explosion protection	no special measurements are required		
7.2	Storage:			
	demands on storerooms and containers	tightly closed at room temperature store in good ventilated rooms and areas		
	indications and prohibitions of storage together with other materials:	do not store together with food		
	further details on storage conditions:	keep out of the reach of children		

VOCO
Material-Safety Data Sheet (Directive 91/155/EEC)

8	<u>Exposition Restriction and Personal Protective Equipment</u>			
8.1	additional information on the equipment of technical facilities: none			
8.2	components with limiting values related to place of work:			
	CAS-No.	name	kind	value unit
	additional information: hazards related to place of work are not known.			
8.3	personal protective equipment:	dental office or laboratory working clothes		
	breathing protection	do not breath or inhale vapour or dust		
	hand protection:	use of protective gloves is recommended		
	eye protection:	use of protective glasses is recommended		
	body protection:			
	protective and hygiene measures:	washing hands		
9	<u>Physical and Chemical Properties</u>			
9.1	appearance:	paste		
	form:	pasty		
	colour:	10 different shades		
	odour:	specific		
9.2	safety data:	tested acc. to:		
	pH upon delivery:	no data available		
	pH of 10g/l H ₂ O and 20°C:	no data available		
	change of state:	no data available		
	boiling point/area:	no data available	°C	
	melting point/area:	no data available	°C	
	flash point:	no data available	°C	
	inflammability:	no data available		
	ignition temperature:	no data available	°C	
	autoignition:	no data available		
	fire advancing properties:	no data available		
	explosion hazards:	no data available		
	explosion limits: LEL:	UEL: no data available		
	vapour pressure (°C)	no data available		
	density (°C)	no data available	hPa	
	bulk density:	no data available		
	solubility in water (20°C) (°C):	no data available	mg/l	
	in (°C)	no data available	mg/l	
	solubility in fat:	no data available		
	distribution coefficient n-octanol/water:	no data available		
	viscosity (°C):	no data available		
	solvent separation test:	no data available	%	
	solvent content:	no data available	%	
9.3	further particulars:	none		
10	<u>Stability and Reactivity</u>			
	conditions to be avoided:	light exposition, heat		
	materials to be avoided:	radical releasing agents, e. g. peroxides		
	hazardous products of decomposition:	HCN, cyanides		
	further particulars:	none		

VOCO
Material-Safety Data Sheet (Directive 91/155/EEC)

<p>11. Toxicological Data</p> <p>11.1 toxicological Test: no data available</p> <p>acute toxicity: no data available</p> <p>LD₅₀/LC₅₀: component kind value species method of determination</p> <p>specific symptoms in animal test: no data available</p> <p>irritant effect/corrosive action: no data available</p> <p>sensitization: no data available</p> <p>effects of repeated exposure or overexposure (subacute or chronic toxicity): no data available</p> <p>carcinogenic and mutagenic effects hazardous to reproduction: no data available</p> <p>other particulars: no data available</p> <p>11.2 practical experience: no data available</p> <p>observations relevant to classifications: no data available</p> <p>other observations: no data available</p> <p>11.3 general remarks: during long-standing product application risks have not become known.</p>
<p>12 <u>Ecological Data</u></p> <p>12.1 information on elimination: no data available</p> <p>procedure analytic method degree of elimination classification</p> <p>evaluation: no data available</p> <p>additional information: no data available</p> <p>12.2 behaviour in environmental compartments: no data available</p> <p>mobility and bioaccumulation potential: no data available</p> <p>additional information: none</p> <p>12.3 environmental toxic effects: no data available</p> <p>aquatic toxicity: no data available</p> <p>organism test period test method result assessment</p> <p>behaviour in sewage plants: no data available</p> <p>respiratory inhibition of local vitalised sludge: no data available</p> <p>12.4 additional information: none</p> <p>CSB-value: no data available mg/g</p> <p>BSB₅-value: no data available mg/g</p> <p>AOX-indication: no data available</p> <p>contains the following heavy metals and compounds (corresponding to guideline 76/464/EEG) according to preparation formula: none</p> <p>general information: none</p>
<p>13 <u>Disposal Instructions</u></p> <p>13.1 product:</p> <p>recommendation: obey local and governmental regulations</p> <p>waste category waste name accountability</p> <p>13.2 uncleaned packing material: obey local and governmental regulations</p> <p>recommendation: obey local and governmental regulations</p> <p>cleaning agents: common cleansing agents for the laboratory</p>

VOCO
Material-Safety Data Sheet (Directive 91/155/EEC)

14	<u>Particulars on Transport</u>		
14.1	land carriage:		
	ADR/RID/GGVS/GGVE-class:	figure/letter:	material no.:
	warning label:	risk no.:	
	designation of goods:		
	remarks:		
14.2	inland transport by ship:		
	ADN/ADNR-class:	figure/letter:	category:
	designation of goods:		
	remarks:		
14.3	see transport:		
	IMDG/GGV sea class:	UN-No.:	PG:
	EMS:	MFAG:	
	marine pollutant:		
	correct technical name:		
	remarks:		
14.4	air transport:		
	ICAO/IATA-class:	UN/ID-No.:	PG:
	correct technical name:		
	remarks:		
14.5	further particulars:	No hazardous goods within the meaning of transport regulations	
15	<u>Regulation</u>		
15.1	marking:	acc. to governmental regulations concerning declaration of dangerous chemicals no marking is prescribed	
	danger symbol and designation:	none	
	contains:		
	R-categories:	none	
	S-categories:	none	
	special marking of particular preparations:	none	
15.2	national regulations:	acc. to article 10 of Directive 66/379 EEC and 67/548 EEC	
	restrictions of employment:	none	
	instructions in case of interference:	none	
	classification acc. VbF:	not applicable	
	technical instruction air:	not applicable	
	water pollution class:	no data available	
	other regulations, restrictions and prohibitions:	Directive 91/155 EEC; medical product acc. to 93/42 EEC (medical products).	
16	<u>Other Particulars</u>		
	All information above has been given according to our present state of knowledge. It has been compiled to the best of our knowledge. The above -mentioned data do not represent a guarantee on characteristics. They only describe the safety requirements with regard to our products. They do not represent an assurance of product characteristics in the meaning of guarantees.		