SAFETY DATA SHEETS

This SDS packet was issued with item:

073650439

N/A

DENTSPLY International
DENTSPLY PROSTHETICS

Safety Data Sheet

Safety Data Sheet (in compliance with Regulation (EC) 1907/2006, Regulation (EC) 1272/2008 and Regulation (EC) 453/2010)

Date Issued: 5 February 2002
Document Number: 378
Date Revised: 27 February 2015
Revision Number: 4

1. PRODUCT IDENTIFICATION

Trade Name (as labeled):	**Austenal® Cutting Discs**
Product Identifier (Part/Item Number):	**N056100, N056300, N056500**
U.N. Number:	**None**
U.N. Dangerous Goods Classification:	**None**
Recommended Use:	**Abrasives for cutting dental resin appliances**
Restrictions on Use:	**For Professional Use Only**
Manufacturer/Supplier Name:	**DENTSPLY Prosthetics**
Manufacturer/Supplier Address:	**570 West College Ave.**
	York, PA 17401
Manufacturer/Supplier Telephone Number:	**717-845-7511 (Product Information)**
Emergency Contact Telephone Number:	**800-424-9300 Chemtrec**
Email address:	**Prosthetics_MSDS@Dentsply.com**

2. HAZARD(s) IDENTIFICATION

EU Classification (1999/45/EC): Not Classified as Hazardous

Labeling in accordance with 1999/45/EC: No labeling required

US Hazard Classification: Hazardous

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Components	C.A.S. # EC#	EINECS #	Substance Classification	WT %
Aluminum Oxide	1344-28-1	215-691-6	Not classified as hazardous	<80%
Iron Oxide	1309-37-1	215-168-2	Not classified as hazardous	<10%

Titanium dioxide	13463-67-7	236-675-5	Not classified as hazardous	<10%

4. FIRST-AID MEASURES

If exposed to dust from polishing or grinding:

Routes of Exposure	**First Aid Instructions**
Eye	Flush eyes thoroughly with water, holding open eyelids. Get medical attention if irritation persists.
Skin	Wash skin with soap and water after use.
Inhalation	Remove victim to fresh air. If irritation persists, get medical attention.
Ingestion	No adverse effects expected.
Most important symptoms of exposure	Dust may cause eye and respiratory irritation. Dust particles may cause abrasive injury to the eyes. This product contains titanium dioxide, which may cause cancer based on animal studies
Note to Physicians (Treatment, Testing, and Monitoring): Treat symptomatically.	

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Use media appropriate for surrounding fire.
Fire Fighting Procedures:	Use water to cool fire exposed containers.
Specific Hazards Arising from the Chemical:	This product is not combustible
Precautions for Fire Fighters:	Firefighters should wear full emergency equipment and approved positive pressure self-containing breathing apparatus.

Recommended Protective Equipment for Fire Fighters:

EYES/FACE	HANDS	RESPIRATORY	THERMAL
			

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, PPE and Emergency Procedures: Avoid contact with eyes. Avoid breathing dust.
Environmental Precautions: Report releases as required by local and national authorities

Methods and Materials for Containment and Clean-up: Pick up, sweep up or vacuum up and place into a container for disposal. Minimized the generation of dust.

Recommended Personal Protective Equipment for Containment and Clean-up:			
EYES/FACE	**HANDS**	**RESPIRATORY**	**THERMAL**
			

7. HANDLING AND STORAGE

Precautions for Safe Handing: Avoid breathing dust. Wash hands thoroughly after cutting or grinding. Use with adequate ventilation. Avoid generating dust. Use good housekeeping to prevent the accumulation of dust on surfaces.
Conditions for Safe Storage: No special storage required.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:	
Aluminum Oxide	5 mg/m^3 TWA OSHA PEL (respirable fraction), 15 mg/m^3 TWA OSHA PEL (total dust)) 1 mg/m^3 TWA ACGIH TLV (respirable fraction) (as aluminum insoluble compounds) 1.5 mg/m^3 TWA (respirable), 4 mg/m^3 TWA (inhalable) DFG MAK 10 mg/m^3 (inhalable); 4 mg/m^3 (respirable dust) TWA UK OEL
Iron Oxide	10 mg/m^3 TWA OSHA PEL (fume) 5 mg/m^3 TWA ACGIH TLV (respirable fraction) 5 mg/m^3 TWA UK OEL, 10 mg/m^3 STEL
Titanium Dioxide	15 mg/m^3 TWA OSHA PEL (total dust) 10 mg/m^3 TWA ACGIH TLV 10 mg/m^3 (inhalable); 4 mg/m^3 (respirable dust) TWA UK OEL
Biological Exposure Limits: None	
Appropriate Engineering Controls: Use adequate general or local exhaust ventilation to maintain exposures below the occupational exposure limits.	
Individual Protection Measures (PPE) **Specific Eye/face Protection:** Safety glasses or goggles recommended, **Specific Skin Protection:** Wear rubber or other impervious gloves to avoid prolonged contact. Impervious clothing as needed to avoid contamination of personal clothing. Recommended glove: Rubber. Consult glove supplier for thickness and breakthrough times. **Specific Respiratory Protection:** If the exposure limits are exceeded an approved particulate respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory	

equipment must be in accordance with all applicable regulations and good industrial hygiene practice.
Specific Thermal Hazards: None needed.

Recommended Personal Protective Equipment			
EYES/FACE	**HANDS**	**RESPIRATORY**	**THERMAL**
			
Environmental Exposure Controls: Use dust collection if needed to avoid release to the environment.			
General Hygiene Considerations and Work Practices: Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.			
Protective Measures During Repair and Maintenance of Contaminated Equipment: Wear appropriate protective clothing and equipment.			

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Abrasive discs.	**Explosive limits:**	Not applicable
Odor:	May produce an odor in use.	**Vapor pressure:**	Not applicable
Odor threshold:	None	**Vapor density:**	Not applicable
pH:	Not applicable	**Relative density:**	2-4
Melting/freezing point:	Not applicable	**Solubility:**	Slightly
Initial boiling point and range:	Not applicable	**Partition coefficient: n-octanol/water:**	Not available
Flash point:	Not flammable	**Auto-ignition temperature:**	Not applicable
Evaporation rate:	Not applicable	**Decomposition temperature:**	Not available
Flammability:	Not flammable	**Viscosity:**	Not applicable
Explosive Properties:	None	**Oxidizing Properties:**	None

10. STABILITY AND REACTIVITY

Reactivity: Not reactive.

Chemical Stability: Stable.

Possibility of Hazardous Reactions: None known.

Conditions to Avoid: None known.

Incompatible materials: None known.

Hazardous Decomposition Products: Dust is generated during use. In most cases, the material removed from the base material will be significantly greater than the grinding wheel components.

11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eyes: Dust generated during grinding may cause mechanical eye irritation.
Skin: Dust may cause abrasive irritation.
Ingestion: No adverse effects expected. Ingestion of large amounts may cause gastrointestinal irritation.
Inhalation: Dust may cause mucous membrane and upper respiratory tract irritation with coughing and sneezing.

Chronic Health Effects: Prolonged skin contact may cause irritation.

Carcinogenicity: Titanium dioxide is classified by IARC as possibly carcinogenic to humans (Group 2B). None of the other components are listed as carcinogens by OSHA, IARC, NTP, ACGIH or the EU Substances Directive.

Mutagenicity: No data is available. This product is not expected to cause mutagenic activity.

Medical Conditions Aggravated by Exposure: None known.

Acute Toxicity Data:
Aluminum Oxide: Oral rat LD50 >10,000 mg/kg; Inhalation rat LC50 >6.82 mg/L/4 hr; Inhalation rat LC50 7.6 mg/L/1 hr
Iron Oxide: No data available.
Titanium Dioxide: Oral rat LD50 >5,000 mg/kg; Inhalation rat LC50 >6.82 mg/L/4 hr.

Reproductive Toxicity Data: No data available. This product is not expected to cause adverse reproductive effects.

Specific Target Organ Toxicity (STOT):
Single Exposure: No data available.
Repeated Exposure: Male rats were exposed by oral gavage for 29 days to 24,000 mg/kg of titanium dioxide. . Under the conditions of this study, no adverse effects at this dose were observed. NOEL 24,000 mg/kg. In a 2 year inhalations, rats were exposed to 10, 50 and 250 mg/kg of titanium dioxide. Bronchioloalveolar adenomas and cystic keratinising squamous cell carcinoma occurred at 250 mg/m³ TiO2 exposure (the tumours produced were ultimately characterised as primarily benign pulmonary keratin cysts while no compound-related lung tumours were found in rats exposed either to 10 or 50 mg/m³.

12. ECOLOGICAL INFORMATION

Toxicity: Aluminum Oxide: No data available. Iron Oxide: No data available. Titanium Dioxide: No data available
Persistence and Degradability: Biodegradation is not applicable to inorganic substances.
Bio-accumulative Potential: The potential for bioacumulate is expected to be low.
Mobility in Soil: No data available.
Other Adverse Effects: None known
Results of PBT/vPvB Assessment: Not required

13. DISPOSAL CONSIDERATIONS

Regulations: Dispose in accordance with all national and local regulations.
Properties (Physical/Chemical) Affecting Disposal: None currently known.
Waste Treatment Recommendations: None known.

14. TRANSPORT INFORMATION

UN Number:	ADR/RID: None	IMDG: None	IATA: None	DOT: None
UN proper shipping name:	ADR/RID: Not Regulated IMDG: Not Regulated IATA: Not Regulated DOT: Not Regulated			
Transport hazard class(es):	ADR/RID: None	IMDG: None	IATA: None	DOT: None
Packaging group:	ADR/RID: None	IMDG: None	IATA: None	DOT: None
Environmental hazards:	ADR/RID: No	IMDG Marine pollutant: No	IATA: No	DOT: No
Special precautions for user: Not applicable				

15. REGULATORY INFORMATION

U.S. Federal Regulations

US OSHA Hazard Classification: Carcinogen.

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): This product is not subject to

CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

Toxic Substances Control Act (TSCA): This product is an article and is exempt from the TSCA regulations.

Clean Water Act (CWA): This material is not regulated under the Clean Water Act

Clean Air Act (CAA): This material is not regulated under the Clean Air Act

Superfund Amendments and Reauthorization Act (SARA) Title III Information:

SARA Section 311/312 (40 CFR 370) Hazard Categories:

Immediate Hazard:	**No**	**Pressure Hazard:**	**No**
Delayed Hazard:	**Yes**	**Reactivity Hazard:**	**No**
Fire Hazard:	**No**		

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):

Components	C.A.S. #	WT %
None		

State Regulations

California: This product contains the following chemicals(s) known to the State of California to cause cancer, birth defects or reproductive harm:

Components	C.A.S. #	WT %
Acrylonitrile	**107-13-1**	<1 ppm
1, 3 Butadiene	106-99-0	< 1 ppm
Titanium Dioxide	13463-67-7	<10%

International Regulations

Canadian Environmental Protection Act: This product is a manufactured article and not subject to chemical notification requirements.

Canadian Workplace Hazardous Materials Information System (WHMIS): Not a controlled product.

European Inventory of Existing Chemicals (EINECS): This product is a manufactured article and not subject to chemical notification requirements.

EU REACH: All components requiring registration have been pre-registered.

Australian Inventory of Chemical Substances: This product is a manufactured article and not subject to chemical notification requirements.

China Inventory of Existing Chemicals and Chemical Substances: This product is a manufactured article and not subject to chemical notification requirements.

Japanese Existing and New Chemical Substances: This product is a manufactured article and not subject to chemical notification requirements.

Korean Existing Chemicals List: This product is a manufactured article and not subject to chemical notification requirements.

Philippine Inventory of Chemicals and Chemical Substances: This product is a manufactured article and not subject to chemical notification requirements.

16. OTHER INFORMATION

HMIS Hazard Rating:
Health –1 Flammability – 0 Physical Hazard– 0

Full text of Classification abbreviations used in Section 2 and 3: None

Date of Latest Revision: 27 February 2015

Supersedes: 11 September 2011

Revision Summary: Comprehensive review. Changes to all sections.

Data Sources: US NLM ChemID Plus and HSDB, Substance SDS for components, IUCLID Dataset EU Chemical Bureau, ESIS, Country websites for occupational exposure limits.

Dentsply Cutting Discs & Ultra Thin Discs

Dentsply (Australia)

Chemwatch Hazard Alert Code: **2**

Chemwatch: **4620-23**
Version No: **4.1.1.1**
Material Safety Data Sheet according to NOHSC and ADG requirements

Issue Date: **01/01/2013**
Print Date: **07/10/2014**
Initial Date: **Not Available**
S.Local.AUS.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	Dentsply Cutting Discs & Ultra Thin Discs
Chemical Name	Not Applicable
Synonyms	Cutting Discs & Ultra Thin Discs
Proper shipping name	Not Applicable
Chemical formula	Not Applicable
Other means of identification	Not Available
CAS number	Not Applicable

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

Relevant identified uses	Dental restoration.

Details of the manufacturer/importer

Registered company name	Dentsply (Australia)
Address	11-21 Gilby Road Mount Waverley 3149 VIC Australia
Telephone	+61 3 9538 8240
Fax	+61 3 9538 8260
Website	www.dentsply.com.au
Email	Not Available

Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	1300 552 929 (Mon-Fri 9am-5pm)
Other emergency telephone numbers	1300 552 929 (Mon-Fri 9am-5pm)

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to NOHSC Criteria, and ADG Code.

CHEMWATCH HAZARD RATINGS

	Min	Max
Flammability	0	
Toxicity	2	
Body Contact	2	
Reactivity	0	
Chronic	0	

0 = Minimum
1 = Low
2 = Moderate
3 = High
4 = Extreme

Poisons Schedule	Not Applicable
Risk Phrases	Not Applicable
Legend:	*1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI*

Continued...

Not Applicable

Relevant risk statements are found in section 2

Indication(s) of danger	Not Applicable

SAFETY ADVICE

Not Applicable

Other hazards

	May produce discomfort of the eyes, respiratory tract and skin*.
	Inhalation may produce health damage*.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
409-21-2	NotSpec.	silicon carbide, fibrous form
1332-58-7	NotSpec.	kaolin

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: ▸ Wash out immediately with fresh running water. ▸ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▸ Seek medical attention without delay; if pain persists or recurs seek medical attention. ▸ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: ▸ Immediately remove all contaminated clothing, including footwear. ▸ Flush skin and hair with running water (and soap if available). ▸ Seek medical attention in event of irritation.
Inhalation	▸ If fumes or combustion products are inhaled remove from contaminated area. ▸ Lay patient down. Keep warm and rested. ▸ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ▸ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. ▸ Transport to hospital, or doctor.
Ingestion	▸ Immediately give a glass of water. ▸ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

	▸ There is no restriction on the type of extinguisher which may be used. ▸ Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.

Advice for firefighters

Fire Fighting	▸ Alert Fire Brigade and tell them location and nature of hazard. ▸ Wear breathing apparatus plus protective gloves in the event of a fire. ▸ Prevent, by any means available, spillage from entering drains or water courses. ▸ Use fire fighting procedures suitable for surrounding area.

Continued...

Fire/Explosion Hazard	▸ Non combustible. ▸ Not considered a significant fire risk, however containers may burn. Decomposition may produce toxic fumes of:, silicon dioxide (SiO2)May emit poisonous fumesMay emit corrosive fumes.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	▸ Remove all ignition sources. ▸ Clean up all spills immediately. ▸ Avoid contact with skin and eyes. ▸ Control personal contact with the substance, by using protective equipment.
Major Spills	Moderate hazard. ▸ **CAUTION**: Advise personnel in area. ▸ Alert Emergency Services and tell them location and nature of hazard. ▸ Control personal contact by wearing protective clothing.

	Personal Protective Equipment advice is contained in Section 8 of the MSDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	▸ Avoid all personal contact, including inhalation. ▸ Wear protective clothing when risk of exposure occurs. ▸ Use in a well-ventilated area. ▸ Prevent concentration in hollows and sumps.
Other information	▸ Store in original containers. ▸ Keep containers securely sealed. ▸ Store in a cool, dry area protected from environmental extremes. ▸ Store away from incompatible materials and foodstuff containers.

Conditions for safe storage, including any incompatibilities

Suitable container	▸ Polyethylene or polypropylene container. ▸ Check all containers are clearly labelled and free from leaks.
Storage incompatibility	None known

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	silicon carbide, fibrous form	Silicon carbide (a)	10 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	kaolin	Kaolin (a)	10 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
Dentsply Cutting Discs & Ultra Thin Discs	Not Available	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
silicon carbide, fibrous form	Not Available	Not Available
kaolin	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.
Personal protection	
Eye and face protection	‣ Safety glasses with side shields ‣ Chemical goggles. ‣ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience.
Skin protection	See Hand protection below
Hands/feet protection	‣ Wear chemical protective gloves, e.g. PVC. ‣ Wear safety footwear or safety gumboots, e.g. Rubber
Body protection	See Other protection below
Other protection	‣ Overalls. ‣ P.V.C. apron. ‣ Barrier cream.
Thermal hazards	Not Available

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:
"Forsberg Clothing Performance Index".
The effect(s) of the following substance(s) are taken into account in the ***computer-generated*** selection:
Dentsply Cutting Discs & Ultra Thin Discs Not Available

Material	CPI

* CPI - Chemwatch Performance Index
A: Best Selection
B: Satisfactory; may degrade after 4 hours continuous immersion
C: Poor to Dangerous Choice for other than short term immersion
NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -
* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Respiratory protection

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	P1 Air-line*	- -	PAPR-P1 -
up to 50 x ES	Air-line**	P2	PAPR-P2
up to 100 x ES	-	P3	-
		Air-line*	-
100+ x ES	-	Air-line**	PAPR-P3

* - Negative pressure demand ** - Continuous flow
A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Grey, odourless solid; does not mix with water.

Physical state	Divided Solid	**Relative density (Water = 1)**	2-4
Odour	Not Available	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Applicable
pH (as supplied)	Not Applicable	**Decomposition temperature**	Not Available
Melting point / freezing point (°C)	Not Available	**Viscosity (cSt)**	Not Applicable
Initial boiling point and boiling range (°C)	Not Available	**Molecular weight (g/mol)**	Not Applicable
Flash point (°C)	Not Available	**Taste**	Not Available

Continued...

Evaporation rate	Not Applicable	**Explosive properties**	Not Available
Flammability	Not Available	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	Not Applicable	**Surface Tension (dyn/cm or mN/m)**	Not Applicable
Lower Explosive Limit (%)	Not Applicable	**Volatile Component (%vol)**	Not Applicable
Vapour pressure (kPa)	Not Applicable	**Gas group**	Not Available
Solubility in water (g/L)	Partly Miscible	**pH as a solution(1%)**	Not Applicable
Vapour density (Air = 1)	Not Applicable	**VOC g/L**	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	▸ Unstable in the presence of incompatible materials. ▸ Product is considered stable. ▸ Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Inhalation of dusts, generated by the material during the course of normal handling, may be damaging to the health of the individual. Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a significant number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs.
Ingestion	The material has **NOT** been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health).
Skin Contact	Limited evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period. Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis.
Eye	Limited evidence exists, or practical experience suggests, that the material may cause eye irritation in a substantial number of individuals and/or is expected to produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged eye contact may cause inflammation characterised by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur. ▸ Hazard relates to dust released by cutting, grinding, trimming or other shaping operations.
Chronic	Long term exposure to high dust concentrations may cause changes in lung function (i.e. pneumoconiosis) caused by particles less than 0.5 micron penetrating and remaining in the lung. A prime symptom is breathlessness. Lung shadows show on X-ray.

Dentsply Cutting Discs & Ultra Thin Discs	**TOXICITY**	**IRRITATION**
	Not Available	Not Available

Continued...

silicon carbide, fibrous form	TOXICITY	IRRITATION
	Not Available	Not Available
kaolin	TOXICITY	IRRITATION
	Not Available	Not Available

Not available. Refer to individual constituents.

SILICON CARBIDE, FIBROUS FORM	No significant acute toxicological data identified in literature search.
KAOLIN	No significant acute toxicological data identified in literature search. for bentonite clays: Bentonite (CAS No. 1302-78-9) consists of a group of clays formed by crystallisation of vitreous volcanic ashes that were deposited in water. The expected acute oral toxicity of bentonite in humans is very low (LD50>15 g/kg). However, severe anterior segment inflammation, uveitis and retrocorneal abscess from eye exposure were reported when bentonite had been used as a prophypaste.

Acute Toxicity	⊘	**Carcinogenicity**	⊘
Skin Irritation/Corrosion	⊘	**Reproductivity**	⊘
Serious Eye Damage/Irritation	⊘	**STOT - Single Exposure**	⊘
Respiratory or Skin sensitisation	⊘	**STOT - Repeated Exposure**	⊘
Mutagenicity	⊘	**Aspiration Hazard**	⊘

Legend: ✔ *– Data required to make classification available*
✘ *– Data available but does not fill the criteria for classification*
⊘ *– Data Not Available to make classification*

CMR STATUS

Not Applicable

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

Bioaccumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients

Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	▸ Containers may still present a chemical hazard/ danger when empty. ▸ Return to supplier for reuse/ recycling if possible. Otherwise: ▸ If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. ▸ Where possible retain label warnings and MSDS and observe all notices pertaining to the product.

Continued...

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

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

silicon carbide, fibrous form(409-21-2) is found on the following regulatory lists	"Australia Exposure Standards","Australia Inventory of Chemical Substances (AICS)"
kaolin(1332-58-7) is found on the following regulatory lists	"Australia Exposure Standards","International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs","Australia Inventory of Chemical Substances (AICS)"

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.
A list of reference resources used to assist the committee may be found at:
www.chemwatch.net/references

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.