# **SAFETY DATA SHEETS**

# This SDS packet was issued with item:

073650439

N/A

**Dentsply (Australia)** 

Chemwatch: **4620-23**Version No: **4.1.1.1** 

Material Safety Data Sheet according to NOHSC and ADG requirements

Chemwatch Hazard Alert Code: 2

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	Dental restoration.
uses	

# 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		0 = Minimum
Body Contact	2		1 = Low
Reactivity	0		2 = Moderate 3 = High
Chronic	0		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

Issue Date: **01/01/2013**Print Date: **07/10/2014** 

## Not Applicable

Relevant risk statements are found in section 2

Indication(s) o	f
dange	r

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.	<u>kaolin</u>	

# **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	<ul> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>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.</li> <li>Transport to hospital, or doctor.</li> </ul>
Ingestion	<ul> <li>Immediately give a glass of water.</li> <li>First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> </ul>

## 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.

Created by Global Safety Management, Inc. -Tel: 1-813-435-5161 - www.gsmsds.com

Chemwatch: **4620-23** Page **3** of **7** 

Version No: **4.1.1.1** 

#### **Dentsply Cutting Discs & Ultra Thin Discs**

Issue Date: **01/01/2013**Print Date: **07/10/2014** 

#### Fire/Explosion Hazard

- Non combustible.
- Not considered a significant fire risk, however containers may burn.

Decomposition may produce toxic fumes of:, silicon dioxide (SiO2May emit poisonous fumesMay emit corrosive fumes.

#### **SECTION 6 ACCIDENTAL RELEASE MEASURES**

## Personal precautions, protective equipment and emergency procedures

# Minor Spills

**Major 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.

#### ....

# 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**

Issue Date: **01/01/2013**Print Date: **07/10/2014** 

# 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

# Version No: 4.1.1.1 Dentsply Cutting Discs & Ultra Thin Discs

Issue Date: 01/01/2013 Print Date: 07/10/2014

	•		
Evaporation rate	Not Applicable	<b>Explosive properties</b>	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	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
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

muviduai.
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.

Inhalation of dusts, generated by the material during the course of normal handling, may be damaging to the health of the

# 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

Chemwatch: 4620-23 Version No: 4.1.1.1

## Page 6 of 7

# **Dentsply Cutting Discs & Ultra Thin Discs**

Issue Date: 01/01/2013 Print Date: 07/10/2014

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

Not available. Refer to individual constituents.

SILICON CARBIDE, FIBROUS FORM	No significant acute toxicological data identified in literature search.		
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	0	Carcinogenicity	0
Skin Irritation/Corrosion	0	Reproductivity	0
Serious Eye Damage/Irritation	0	STOT - Single Exposure	0
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	0

Legend:

- ✓ Data required to make classification available
- 🗶 Data available but does not fill the criteria for classification
- 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**

Otherwise:

# Waste treatment methods

# **Product / Packaging** disposal

- Containers may still present a chemical hazard/ danger when empty.
- ▶ Return to supplier for reuse/ recycling if possible.

- ▶ 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.

Chemwatch: 4620-23 Page 7 of 7 Issue Date: 01/01/2013 Version No: 4.1.1.1

## **Dentsply Cutting Discs & Ultra Thin Discs**

Print Date: 07/10/2014

## **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, brous form(409-21-2) is found on the following regulatory lists	P)  Re "Australia Exposure Standards", "Australia Inventory of Chemical Substances (AICS)"  y	
		"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.

This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.

**Dentsply (Australia)** 

Chemwatch: **4620-23**Version No: **4.1.1.1** 

Material Safety Data Sheet according to NOHSC and ADG requirements

Chemwatch Hazard Alert Code: 2

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	Dental restoration.
uses	

# Details of the manufacturer/importer

Registered company name	Dentsply (Australia)	
Address	1-21 Gilby Road Mount Waverley 3149 VIC Australia	
Telephone	1 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		0 = Minimum
Body Contact	2		1 = Low
Reactivity	0		2 = Moderate 3 = High
Chronic	0		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

Issue Date: **01/01/2013**Print Date: **07/10/2014** 

## Not Applicable

Relevant risk statements are found in section 2

Indication(s) o	f
dange	r

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.	<u>kaolin</u>

# **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	<ul> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>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.</li> <li>Transport to hospital, or doctor.</li> </ul>
Ingestion	<ul> <li>Immediately give a glass of water.</li> <li>First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> </ul>

## 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.

Created by Global Safety Management, Inc. -Tel: 1-813-435-5161 - www.gsmsds.com

Chemwatch: **4620-23** Page **3** of **7** 

Version No: **4.1.1.1** 

#### **Dentsply Cutting Discs & Ultra Thin Discs**

Issue Date: **01/01/2013**Print Date: **07/10/2014** 

#### Fire/Explosion Hazard

- Non combustible.
- Not considered a significant fire risk, however containers may burn.

Decomposition may produce toxic fumes of:, silicon dioxide (SiO2May emit poisonous fumesMay emit corrosive fumes.

#### **SECTION 6 ACCIDENTAL RELEASE MEASURES**

## Personal precautions, protective equipment and emergency procedures

# Minor Spills

**Major 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.

#### ....

# 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**

Issue Date: **01/01/2013**Print Date: **07/10/2014** 

# 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

# Issue Date: **01/01/2013**Print Date: **07/10/2014**

#### **Dentsply Cutting Discs & Ultra Thin Discs**

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	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
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

	Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a
Inhaled	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.
	The material has <b>NOT</b> been classified by EC Directives or other classification systems as "harmful by ingestion". This is

# 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).

Inhalation of dusts, generated by the material during the course of normal handling, may be damaging to the health of the

# 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

Chemwatch: 4620-23 Version No: 4.1.1.1

## Page 6 of 7

**Dentsply Cutting Discs & Ultra Thin Discs** 

Issue Date: 01/01/2013 Print Date: 07/10/2014

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

Not available. Refer to individual constituents.

SILICON CARBIDE, FIBROUS FORM	No significant acute toxicological data identifie	d 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	0	Carcinogenicity	0
Skin Irritation/Corrosion	0	Reproductivity	0
Serious Eye Damage/Irritation	0	STOT - Single Exposure	0
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	0

Legend:

- ✓ Data required to make classification available
- 🗶 Data available but does not fill the criteria for classification
- 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**

Otherwise:

# Waste treatment methods

# **Product / Packaging** disposal

- Containers may still present a chemical hazard/ danger when empty.

# ▶ Return to supplier for reuse/ recycling if possible.

- ▶ 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.

Chemwatch: 4620-23 Page 7 of 7 Issue Date: 01/01/2013 Version No: 4.1.1.1 Print Date: 07/10/2014

## **Dentsply Cutting Discs & Ultra Thin Discs**

**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.

This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.