

# Dentsply Green Hi Shine

**Hazard Alert Code:**  
**MODERATE**

Chemwatch Material Safety Data Sheet

Version No: 1

Chemwatch 4620-72

Issue Date: 16-Apr-2012

X9317SP

## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### PRODUCT NAME

Dentsply Green Hi Shine

### PRODUCT USE

Dental polishing material.

### SUPPLIER

Company: Dentsply (AUSTRALIA) Pty Ltd

Address:

11-21 Gilby Road

Mount Waverley

VIC, 3149

Australia

Telephone: +61 3 9538 8240

Telephone: 1300 552 929

Emergency Tel: **1300 552 929 (Hrs. Mon.-Fri. 9am-5p)**

Fax: +61 3 9538 8260






Website: www.dentsply.com.au

## Section 2 - HAZARDS IDENTIFICATION

### STATEMENT OF HAZARDOUS NATURE

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

### CHEMWATCH HAZARD RATINGS

		Min	Max	
Flammability:	1			
Toxicity:	2			
Body Contact:	2			
Reactivity:	1			
Chronic:	2			
				Min/Nil=0 Low=1 Moderate=2 High=3 Extreme=4

### POISONS SCHEDULE

None

#### RISK

- Inhalation and/or ingestion may produce health damage\*.
  - Cumulative effects may result following exposure\*.
  - May produce discomfort of the eyes and skin\*.
  - Possible cancer-causing agent\*.
- \* (limited evidence).

#### SAFETY

- Avoid contact with skin.
- Avoid contact with eyes.
- Wear suitable gloves.
- Wear eye/ face protection.
- Use only in well ventilated areas.
- Keep container in a well ventilated place.
- Avoid exposure - obtain special instructions before use.
- In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.

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## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
calcined alumina	1344-28-1.	>65
stearic acid	57-11-4	<25
C.I. Pigment Green 17	1308-38-9	<1

## Section 4 - FIRST AID MEASURES

### SWALLOWED

- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.

### EYE

- 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

- 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.

### INHALED

- 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.
- If dust is inhaled, remove from contaminated area.
- Encourage patient to blow nose to ensure clear breathing passages.
- Ask patient to rinse mouth with water but to not drink water.
- Seek immediate medical attention.

### NOTES TO PHYSICIAN

Treat symptomatically.

- Manifestation of aluminium toxicity include hypercalcaemia, anaemia, Vitamin D refractory osteodystrophy and a progressive encephalopathy (mixed dysarthria-apraxia of speech, asterixis, tremulousness, myoclonus, dementia, focal seizures). Bone pain, pathological fractures and proximal myopathy can occur.
- Symptoms usually develop insidiously over months to years (in chronic renal failure patients) unless dietary aluminium loads are excessive.
- Serum aluminium levels above 60 ug/ml indicate increased absorption. Potential toxicity occurs above 100 ug/ml and clinical symptoms are present when levels exceed 200 ug/ml.
- Deferoxamine has been used to treat dialysis encephalopathy and osteomalacia. CaNa<sub>2</sub>EDTA is less effective in chelating aluminium.

Copper, magnesium, aluminium, antimony, iron, manganese, nickel, zinc (and their compounds) in welding, brazing, galvanising or smelting operations all give rise to thermally produced particulates of smaller dimension than may be produced if the metals are divided mechanically. Where insufficient ventilation or respiratory protection is available these particulates may produce "metal fume fever" in workers from an acute or long term exposure.

- Onset occurs in 4-6 hours generally on the evening following exposure. Tolerance develops in workers but may be lost over the weekend. (Monday Morning Fever)

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- Pulmonary function tests may indicate reduced lung volumes, small airway obstruction and decreased carbon monoxide diffusing capacity but these abnormalities resolve after several months.

## Section 5 - FIRE FIGHTING MEASURES

### EXTINGUISHING MEDIA

- DO NOT use halogenated fire extinguishing agents.
- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

### FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water courses.
- Use water delivered as a fine spray to control fire and cool adjacent area.

### FIRE/EXPLOSION HAZARD

- Combustible.
- Slight fire hazard when exposed to heat or flame.
- Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic fumes of carbon monoxide (CO).

Combustion products include: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), acrolein, other pyrolysis products typical of burning organic material.

When aluminium oxide dust is dispersed in air, firefighters should wear protection against inhalation of dust particles, which can also contain hazardous substances from the fire absorbed on the alumina particles.

May emit poisonous fumes.

May emit corrosive fumes.

### FIRE INCOMPATIBILITY

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

### HAZCHEM

None

## Section 6 - ACCIDENTAL RELEASE MEASURES

### MINOR SPILLS

- Clean up all spills immediately.
- Avoid contact with skin and eyes.
- Wear impervious gloves and safety goggles.
- Trowel up/scrape up.

### MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.

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

## Section 7 - HANDLING AND STORAGE

### PROCEDURE FOR 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.

### SUITABLE CONTAINER

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- Metal can or drum
- Packaging as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

## STORAGE INCOMPATIBILITY

For aluminas (aluminium oxide):

- Incompatible with hot chlorinated rubber.
- In the presence of chlorine trifluoride may react violently and ignite.
- May initiate explosive polymerisation of olefin oxides including ethylene oxide.
- Produces exothermic reaction above 200 C with halocarbons and an exothermic reaction at ambient temperatures with halocarbons in the presence of other metals.
- Avoid reaction with oxidising agents

## STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m <sup>3</sup>	STEL ppm	STEL mg/m <sup>3</sup>	Peak ppm	Peak mg/m <sup>3</sup>	TWA F/CC	Notes
Australia Exposure Standards	calcined alumina (Aluminium oxide (a))		10						(see Chapter 14)
Australia Exposure Standards	C.I. Pigment Green 17 (Chromium (III) compounds (as Cr))		0.5						
Australia Exposure Standards	C.I. Pigment Green 17 (Inspirable dust (not otherwise classified))		10						

### PERSONAL PROTECTION



### RESPIRATOR

- Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

### EYE

- 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 lens 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. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

### HANDS/FEET

- Wear chemical protective gloves, eg. PVC.

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- Wear safety footwear or safety gumboots, eg. Rubber

## OTHER

- Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.

## 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.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

Green paste; does not mix with water.

### PHYSICAL PROPERTIES

Does not mix with water.

Sinks in water.

State	Non Slump Paste	Molecular Weight	Not Applicable
Melting Range (°C)	Not Available	Viscosity	Not Available
Boiling Range (°C)	Not Available	Solubility in water (g/L)	Immiscible
Flash Point (°C)	>100	pH (1% solution)	Not Applicable
Decomposition Temp (°C)	Not Available	pH (as supplied)	Not Applicable
Autoignition Temp (°C)	>300	Vapour Pressure (kPa)	Not Available
Upper Explosive Limit (%)	Not Available	Specific Gravity (water=1)	>1.2
Lower Explosive Limit (%)	Not Available	Relative Vapour Density (air=1)	Not Available
Volatile Component (%vol)	Not Available	Evaporation Rate	Not Available

## Section 10 - CHEMICAL STABILITY

### CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

For incompatible materials - refer to Section 7 - Handling and Storage.

## Section 11 - TOXICOLOGICAL INFORMATION

### POTENTIAL HEALTH EFFECTS

#### ACUTE HEALTH EFFECTS

##### SWALLOWED

■ Accidental ingestion of the material may be damaging to the health of the individual.

Weanling mice receiving diets containing 5-50% stearyl monoglyceride for three weeks, showed depression of weight gain above 10%. Mortalities occurred with the 50% diet.

Acute toxic responses to aluminium are confined to the more soluble forms.

##### EYE

■ There is some evidence to suggest that this material can cause eye irritation and damage in some persons.

##### SKIN

■ Though considered non-harmful, slight irritation may result from contact because of the abrasive nature of

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the aluminium oxide particles. Thus it may cause itching and skin reaction and inflammation.

Open cuts, abraded or irritated skin should not be exposed to this material.

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.

## INHALED

■ The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless inhalation of the material, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress.

Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.

The inhalation of small particles of metal oxide results in sudden thirst, a sweet, metallic foul taste, throat irritation, cough, dry mucous membranes, tiredness and general unwellness. Headache, nausea and vomiting, fever or chills, restlessness, sweating, diarrhoea, excessive urination and prostration may also occur. After exposure is removed, recovery occurs within 24-36 hours.

## CHRONIC HEALTH EFFECTS

■ Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Animal testing shows long term exposure to aluminium oxides may cause lung disease and cancer, depending on the size of the particle. The smaller the size, the greater the tendencies of causing harm.

Exposure to large doses of aluminium has been connected with the degenerative brain disease Alzheimer's Disease.

## TOXICITY AND IRRITATION

■ Not available. Refer to individual constituents.

## CARCINOGEN

Chromium (III) compounds	International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs	Group	3
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## Section 12 - ECOLOGICAL INFORMATION

No data

### Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
calcined alumina	No Data Available	No Data Available		
stearic acid	LOW	No Data Available	LOW	LOW
C.I. Pigment Green 17	No Data Available	No Data Available		

## Section 13 - DISPOSAL CONSIDERATIONS

- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

## Section 14 - TRANSPORTATION INFORMATION

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**HAZCHEM:**

None (ADG7)

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: UN, IATA, IMDG

## Section 15 - REGULATORY INFORMATION

**POISONS SCHEDULE**

None

**REGULATIONS**

**Regulations for ingredients**

**calcined alumina (CAS: 1344-28-1) is found on the following regulatory lists;**

"Australia Exposure Standards", "Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "International Council of Chemical Associations (ICCA) - High Production Volume List", "OECD List of High Production Volume (HPV) Chemicals"

**stearic acid (CAS: 57-11-4) is found on the following regulatory lists;**

"Australia Exposure Standards", "Australia Inventory of Chemical Substances (AICS)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO Provisional Categorization of Liquid Substances - List 1: Pure or technically pure products", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Fragrance Association (IFRA) Survey: Transparency List", "OECD List of High Production Volume (HPV) Chemicals"

**C.I. Pigment Green 17 (CAS: 1308-38-9) is found on the following regulatory lists;**

"Australia - New South Wales Hazardous Substances Requiring Health Surveillance", "Australia Exposure Standards", "Australia Hazardous Substances", "Australia Hazardous Substances Requiring Health Surveillance", "Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "Australia Occupational Health and Safety (Commonwealth Employment) (National Standards) Regulations 1994 - Hazardous Substances Requiring Health Surveillance", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "International Council of Chemical Associations (ICCA) - High Production Volume List", "OECD List of High Production Volume (HPV) Chemicals"

**No data for Dentsply Green Hi Shine (CW: 4620-72)**

## Section 16 - OTHER INFORMATION

**Denmark Advisory list for selfclassification of dangerous substances**

Substance	CAS	Suggested codes
stearic acid	57- 11- 4	T; R25 N; R50

■ 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](http://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.

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Issue Date: 16-Apr-2012

Print Date:24-Jul-2012