

DENTSPLY AQUASIL

Chemwatch Material Safety Data Sheet

Issue Date: 17-Jan-2007

C9317TC

CHEMWATCH 4993-61

CD 2006/4 Page 1 of 7

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

DENTSPLY AQUASIL

SYNONYMS

"Aquasil EasyMix Putty Smart Wetting Impression Material", "Aquasil Ultra Deca", "Aquasil Ultra Heavy DECA Regular Set", "Aquasil Ultra Heavy Fast & Reg Set", "Aquasil Ultra LV Fast & Reg Set", "Aquasil Ultra Monophase Fast & Reg Set", "Aquasil Ultra Rigid Fast & Reg Set", "Aquasil Ultra XLV Fast & Reg Set"

PRODUCT USE

Dental restoration.

SUPPLIER

Company: Dentsply

Address:

11- 21 Gilby Road

Mount Waverley

VIC, 3149

AUS

Telephone: +61 3 9538 8240

Emergency Tel: 0413 830 239

Fax: +61 3 9538 8260

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

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

POISONS SCHEDULE

None

RISK

None under normal operating conditions.

SAFETY

Wear eye/face protection.

Take off immediately all contaminated clothing.

In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
silica amorphous	7631-86-9	NotSpec
silica crystalline - quartz	14808-60-7	NotSpec
sodium aluminosilicate	1344-00-9	NotSpec
dimethylsiloxane, vinyl- terminated polyether/ polymethylsiloxane copolymer in base only	68083-19-2	NotSpec
dimethylsiloxane, methylhydrogen- in catalyst only	Not Avail.	NotSpec
organic platinum complex	68037-59-2	NotSpec
		NotSpec

Section 4 - FIRST AID MEASURES

SWALLOWED

- Immediately give a glass of water.

- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

EYE

If this product comes in contact with the eyes:

continued...

DENTSPLY AQUASIL

Chemwatch Material Safety Data Sheet

Issue Date: 17-Jan-2007

C9317TC

CHEMWATCH 4993-61

CD 2006/4 Page 2 of 7

Section 4 - FIRST AID MEASURES

- Immediately hold eyelids apart and flush the eye continuously with 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.

SKIN

If skin or hair contact occurs:

- Immediately flush body and clothes with large amounts of water, using safety shower if available.
- Quickly remove all contaminated clothing, including footwear.

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

NOTES TO PHYSICIAN

Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- Foam.
- Dry chemical powder.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.

FIRE/EXPLOSION HAZARD

- Combustible.
 - Slight fire hazard when exposed to heat or flame.
- Combustion products include: carbon dioxide (CO₂), sulfur oxides (SO_x), metal oxides, other pyrolysis products typical of burning organic material.
- May emit corrosive fumes.

FIRE INCOMPATIBILITY

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc.

HAZCHEM: None

Personal Protective Equipment

Gloves, boots (chemical resistant).

Section 6 - ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

MINOR SPILLS

- Clean up all spills immediately.
- Avoid contact with skin and eyes.

MAJOR SPILLS

- Minor hazard.
- Clear area of personnel.
 - Alert Fire Brigade and tell them location and nature of hazard.

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.

SUITABLE CONTAINER

- Polyethylene or polypropylene container.

continued...

DENTSPLY AQUASIL

Chemwatch Material Safety Data Sheet

Issue Date: 17-Jan-2007

C9317TC

CHEMWATCH 4993-61

CD 2006/4 Page 3 of 7

Section 7 - HANDLING AND STORAGE

- Packing as recommended by manufacturer.

STORAGE INCOMPATIBILITY

Avoid reaction with oxidising agents.
condensation, silicones, tin and sulfur, amines and peroxides

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³	Peak ppm	Peak mg/m ³	TWA F/CC
Australia Exposure Standards	silica amorphous (Fumed silica (respirable dust))		2					
Australia Exposure Standards	silica crystalline - quartz (Silica crystalline - Quartz)		0.1					
Australia Exposure Standards	sodium aluminosilicate (Inspirable dust (Not specified))		10					

The following materials had no OELs on our records

- dimethylsiloxane, vinyl-terminated: CAS:68083-19-2
- dimethylsiloxane, methylhydrogen-: CAS:68037-59-2

PERSONAL PROTECTION

RESPIRATOR

Type A-P Filter of sufficient capacity

EYE

- Chemical goggles.
- Full face shield may be required for supplementary but never for primary protection of eyes.

HANDS/FEET

Wear protective gloves, eg. PVC.

OTHER

- Overalls.
- P.V.C. apron.

ENGINEERING CONTROLS

General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in specific circumstances.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Various coloured pastes with mint odour; does not mix with water.

PHYSICAL PROPERTIES

Does not mix with water.

Sinks in water.

Molecular Weight: Not Applicable
Melting Range (°C): Not Available
Solubility in water (g/L): Immiscible
pH (1% solution): Not Available
Volatile Component (%vol): Not Available
Relative Vapour Density (air=1): Not

Boiling Range (°C): >200
Specific Gravity (water=1): 1.0- 1.5
pH (as supplied): Not Available
Vapour Pressure (kPa): Not Applicable
Evaporation Rate: 1
Flash Point (°C): >213

continued...

DENTSPLY AQUASIL

Chemwatch Material Safety Data Sheet

Issue Date: 17-Jan-2007

C9317TC

CHEMWATCH 4993-61

CD 2006/4 Page 4 of 7

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Applicable
Lower Explosive Limit (%): Not Available
Autoignition Temp (°C): Not Available
State: Non Slump Paste

Upper Explosive Limit (%): Not Available
Decomposition Temp (°C): Not Available
Viscosity: Not Available

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS CHRONIC HEALTH EFFECTS

TOXICITY AND IRRITATION

TOXICITY
Oral (Rat) LD50: >2000 mg/kg

IRRITATION

SILICA AMORPHOUS:
TOXICITY
Oral (rat) LD50: 3160 mg/kg
Dermal (rabbit) LD50: >5000 mg/kg *
Inhalation (rat) LC50: >0.139 mg/l/14h *
The substance is classified by IARC as Group 3:

IRRITATION
Skin (rabbit): non- irritating *
Eye (rabbit): non- irritating *
* [Grace]

NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing.
Reports indicate high/prolonged exposures to amorphous silicas induced lung fibrosis in experimental animals; in some experiments these effects were reversible. [PATTYS]

SILICA CRYSTALLINE - QUARTZ:
TOXICITY
Inhalation (human) LCLo: 0.3 mg/m³/10Y
Inhalation (human) TCLo: 16 mppcf/8H/17.9Y
Inhalation (rat) TCLo: 50 mg/m³/6H/71W
WARNING: For inhalation exposure ONLY: This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS.

IRRITATION
Nil Reported

Intermittent; focal fibrosis,
(pneumoconiosis), cough, dyspnoea
Intermittent; liver - tumours.

* Millions of particles per cubic foot (based on impinger samples counted by light field techniques).

NOTE : the physical nature of quartz in the product determines whether it is likely to present a chronic health problem. To be a hazard the material must enter the breathing zone as respirable particles.

SODIUM ALUMINOSILICATE:
TOXICITY
Oral (rat) LDLo: >32000 mg/kg Nil Reported
[Kirk]

IRRITATION
[

DIMETHYLSILOXANE, VINYL-TERMINATED:
TOXICITY
Oral (rat) LD50: >16 ml/kg
Dermal (rabbit) LD50: >16 ml/kg

IRRITATION
Nil Reported

POLYETHER/ POLYMETHYLSILOXANE COPOLYMER:
TOXICITY
For the product:
Oral (rat) LD50: >5000 mg/kg

IRRITATION
[Goldschmidt]

DIMETHYLSILOXANE, METHYLHYDROGEN-:
No significant acute toxicological data identified in literature search.

MATERIAL	CARCINOGEN	REPROTOXIN	SENSITISER	SKIN
----------	------------	------------	------------	------

continued...

DENTSPLY AQUASIL

Chemwatch Material Safety Data Sheet

Issue Date: 17-Jan-2007

C9317TC

CHEMWATCH 4993-61

CD 2006/4 Page 5 of 7

Section 11 - TOXICOLOGICAL INFORMATION

silica amorphous IARC:3
silica crystalline - quartz IARC:1
sodium aluminosilicate IARC:1

CARCINOGEN

IARC: International Agency for Research on Cancer (IARC) Carcinogens: silica amorphous Category: 3

CARCINOGEN

IARC: International Agency for Research on Cancer (IARC) Carcinogens: silica crystalline - quartz Category: 1

CARCINOGEN

IARC: International Agency for Research on Cancer (IARC) Carcinogens: sodium aluminosilicate Category: 1

Section 12 - ECOLOGICAL INFORMATION

No data

Section 13 - DISPOSAL CONSIDERATIONS

- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Management Authority for disposal.

Section 14 - TRANSPORTATION INFORMATION

HAZCHEM: None

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS:UN

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE: None

REGULATIONS

silica amorphous (CAS: 7631-86-9) is found on the following regulatory lists;

Australia - Australia New Zealand Food Standards Code - Food Additives - Schedule 1 type

Permitted uses of food additives by food

Australia Exposure Standards

Australia High Volume Industrial Chemical List (HVICL)

Australia Inventory of Chemical Substances (AICS)

CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified

, in Accordance with GMP

EU Directive 2002/72/EC Plastic materials and articles intended to come into contact with foodstuffs - Annex III Section A

Incomplete list of additives fully harmonised at Community level

European Customs Inventory of Chemical Substances - ECICS (Danish)

European Customs Inventory of Chemical Substances - ECICS (Dutch)

European Customs Inventory of Chemical Substances - ECICS (French)

European Customs Inventory of Chemical Substances - ECICS (German)

European Customs Inventory of Chemical Substances - ECICS (Italian)

European Customs Inventory of Chemical Substances - ECICS (Spanish)

European Customs Inventory of Chemical Substances - ECICS (Swedish)

European Customs Inventory of Chemical Substances (English)

European Inventory of Existing Commercial Substances - EINECS

European Union (EU) Inventory of Ingredients used in Cosmetic Products

International Agency for Research on Cancer (IARC) Carcinogens

International Council of Chemical Associations (ICCA) - High Production Volume List

OECD Representative List of High Production Volume (HPV) Chemicals

silica amorphous (CAS: 112945-52-5) is found on the following regulatory lists;

Australia High Volume Industrial Chemical List (HVICL)

Australia Inventory of Chemical Substances (AICS)

European Union (EU) Inventory of Ingredients used in Cosmetic Products

International Council of Chemical Associations (ICCA) - High Production Volume List

OECD Representative List of High Production Volume (HPV) Chemicals

continued...

DENTSPLY AQUASIL

Chemwatch Material Safety Data Sheet

Issue Date: 17-Jan-2007

C9317TC

CHEMWATCH 4993-61

CD 2006/4 Page 6 of 7

Section 15 - REGULATORY INFORMATION

silica crystalline - quartz (CAS: 14808-60-7) is found on the following regulatory lists;
Australia - New South Wales Hazardous Substances Prohibited for Specific Uses
Australia - New South Wales Hazardous Substances Requiring Health Surveillance
Australia - South Australia Hazardous Substances Requiring Health Surveillance
Australia - Tasmania Hazardous Substances Prohibited for Specified Uses
Australia - Tasmania Hazardous Substances Requiring Health Surveillance
Australia - Western Australia Hazardous Substances Requiring Health Surveillance
Australia Exposure Standards
Australia Hazardous Substances Requiring Health Surveillance
Australia High Volume Industrial Chemical List (HVICL)
Australia Inventory of Chemical Substances (AICS)
Australia Occupational Health and Safety (Commonwealth Employment) (National Standards) Regulations 1994 - Hazardous Substances Requiring Health Surveillance

EU Directive 2002/72/EC Plastic materials and articles intended to come into contact with foodstuffs - Annex III Section A
Incomplete list of additives fully harmonised at Community level
European Inventory of Existing Commercial Substances - EINECS
European Union (EU) Restrictions on the Marketing and Use of Certain Dangerous Substances and Preparations
International Agency for Research on Cancer (IARC) Carcinogens
OECD Representative List of High Production Volume (HPV) Chemicals

sodium aluminosilicate (CAS: 1344-00-9) is found on the following regulatory lists;
Australia - Australia New Zealand Food Standards Code - Food Additives - Schedule 2 Miscellaneous additives permitted in accordance with GMP in processed foods specified in Schedule 1
Australia Exposure Standards
Australia Inventory of Chemical Substances (AICS)
CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified
, in Accordance with GMP

European Customs Inventory of Chemical Substances - ECICS (Danish)
European Customs Inventory of Chemical Substances - ECICS (Dutch)
European Customs Inventory of Chemical Substances - ECICS (French)
European Customs Inventory of Chemical Substances - ECICS (German)
European Customs Inventory of Chemical Substances - ECICS (Italian)
European Customs Inventory of Chemical Substances - ECICS (Spanish)
European Customs Inventory of Chemical Substances - ECICS (Swedish)
European Customs Inventory of Chemical Substances (English)
European Inventory of Existing Commercial Substances - EINECS
European Union (EU) Inventory of Ingredients used in Cosmetic Products
IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances
International Agency for Research on Cancer (IARC) Carcinogens
International Council of Chemical Associations (ICCA) - High Production Volume List
OECD Representative List of High Production Volume (HPV) Chemicals

sodium aluminosilicate (CAS: 12003-51-9) is found on the following regulatory lists;
Australia Exposure Standards
European Inventory of Existing Commercial Substances - EINECS
International Agency for Research on Cancer (IARC) Carcinogens

dimethylsiloxane, vinyl-terminated (CAS: 68083-19-2) is found on the following regulatory lists;
Australia Inventory of Chemical Substances (AICS)
Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 4
OECD Representative List of High Production Volume (HPV) Chemicals

polyether/ polymethylsiloxane copolymer (CAS No:Not Avail):
No regulations applicable

dimethylsiloxane, methylhydrogen- (CAS: 68037-59-2) is found on the following regulatory lists;
Australia Inventory of Chemical Substances (AICS)
Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 4

No data available for polyether/ polymethylsiloxane copolymer as CAS: Not Avail.

Section 16 - OTHER INFORMATION

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name	CAS
silica amorphous	7631- 86- 9, 112945- 52- 5
sodium	1344- 00- 9, 12003- 51- 9
aluminosilicate	

DENTSPLY AQUASIL

Chemwatch Material Safety Data Sheet

Issue Date: 17-Jan-2007

C9317TC

CHEMWATCH 4993-61

CD 2006/4 Page 7 of 7

Section 16 - OTHER INFORMATION

Issue Date: 17-Jan-2007

Print Date: 17-Jan-2007