

# DENTSPLY DE TREY CONDITIONER 36 / DE TREY ETCH

ChemWatch Material Safety Data Sheet  
Issue Date: Mon 18-Oct-2004

CHEMWATCH 4620-6  
CD 2004/3 Page 1 of 13

---

## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

---

### PRODUCT NAME

DENTSPLY DE TREY CONDITIONER 36 / DE TREY ETCH

### SYNONYMS

### PROPER SHIPPING NAME

PHOSPHORIC ACID

### PRODUCT USE

Dental etching gel.

### SUPPLIER

Company: Dentsply (Australia) Pty Ltd (ABN: 15 004 290 322)

Address:

11-21 Gilby Road

Mount Waverley

VIC, 3149

AUS

Telephone: +61 03 9538 8240

Emergency Tel: 0413 830 239

Fax: 03 9538 8260

---

## Section 2 - HAZARDS IDENTIFICATION

---

### STATEMENT OF HAZARDOUS NATURE

**HAZARDOUS SUBSTANCE. DANGEROUS GOODS.**

According to the Criteria of NOHSC, and the ADG Code.

### POISONS SCHEDULE

None

### RISK

Harmful if swallowed.

Causes burns.

Risk of serious damage to eyes.

May cause long-term adverse effects in the environment.

Cumulative effects may result following exposure\*.

Limited evidence of a carcinogenic effect\*.

\* (limited evidence).

continued...

# DENTSPLY DE TREY CONDITIONER 36 / DE TREY ETCH

ChemWatch Material Safety Data Sheet  
Issue Date: Mon 18-Oct-2004

CHEMWATCH 4620-6  
CD 2004/3 Page 2 of 13

---

## Section 2 - HAZARDS IDENTIFICATION ...

---

### SAFETY

Keep locked up.  
Do not breathe dust.  
Avoid contact with eyes.  
Wear suitable protective clothing.  
To clean the floor and all objects contaminated by this material, use water and detergent.  
Take off immediately all contaminated clothing.  
In case of accident or if you feel unwell IMMEDIATELY contact Doctor or Poisons Information Centre (show label if possible).

---

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

---

NAME	CAS RN	%
phosphoric acid	7664-38-2	35
silica amorphous	7631-86-9	5.6

---

## Section 4 - FIRST AID MEASURES

---

### SWALLOWED

- For advice, contact a Poisons Information Centre or a doctor at once.
- Urgent hospital treatment is likely to be needed.
- 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.
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Transport to hospital or doctor without delay.

### EYE

If this product comes in contact with the eyes:

- 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.
- Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
- Transport to hospital or doctor without delay.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

continued...

# DENTSPLY DE TREY CONDITIONER 36 / DE TREY ETCH

ChemWatch Material Safety Data Sheet  
Issue Date: Mon 18-Oct-2004

CHEMWATCH 4620-6  
CD 2004/3 Page 3 of 13

## Section 4 - FIRST AID MEASURES ...

### 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.
- Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.
- Transport to hospital, or doctor.

### 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.
- Transport to hospital, or doctor, without delay.

### NOTES TO PHYSICIAN

For acute or short term repeated exposures to strong acids:

- Airway problems may arise from laryngeal edema and inhalation exposure. Treat with 100% oxygen initially.
- Respiratory distress may require cricothyroidotomy if endotracheal intubation is contraindicated by excessive swelling
- Intravenous lines should be established immediately in all cases where there is evidence of circulatory compromise.
- Strong acids produce a coagulation necrosis characterised by formation of a coagulum (eschar) as a result of the dessicating action of the acid on proteins in specific tissues.

#### INGESTION:

- Immediate dilution (milk or water) within 30 minutes post ingestion is recommended.
- DO NOT attempt to neutralise the acid since exothermic reaction may extend the corrosive injury.
- Be careful to avoid further vomit since re-exposure of the mucosa to the acid is harmful. Limit fluids to one or two glasses in an adult.
- Charcoal has no place in acid management.
- Some authors suggest the use of lavage within 1 hour of ingestion.

#### SKIN:

- Skin lesions require copious saline irrigation. Treat chemical burns as thermal burns with non-adherent gauze and wrapping.
- Deep second-degree burns may benefit from topical silver sulfadiazine.

#### EYE:

- Eye injuries require retraction of the eyelids to ensure thorough irrigation of the conjunctival cul-de-sacs. Irrigation should last at least 20-30 minutes. DO NOT use neutralising agents or any other additives. Several litres of saline are required.
  - Cycloplegic drops, (1% cyclopentolate for short-term use or 5% homatropine for longer term use) antibiotic drops, vasoconstrictive agents or artificial tears may be indicated dependent on the severity of the injury.
  - Steroid eye drops should only be administered with the approval of a consulting ophthalmologist).
- [Ellenhorn and Barceloux: Medical Toxicology].

continued...

# DENTSPLY DE TREY CONDITIONER 36 / DE TREY ETCH

ChemWatch Material Safety Data Sheet  
Issue Date: Mon 18-Oct-2004

CHEMWATCH 4620-6  
CD 2004/3 Page 4 of 13

---

## Section 4 - FIRST AID MEASURES ...

---

---

## Section 5 - FIRE FIGHTING MEASURES

---

### EXTINGUISHING MEDIA

- Water spray or fog.
- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

### FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
  - Wear full body protective clothing with breathing apparatus.
  - Prevent, by any means available, spillage from entering drains or water course.
  - Use fire fighting procedures suitable for surrounding area.
  - Do not approach containers suspected to be hot.
  - Cool fire exposed containers with water spray from a protected location.
  - If safe to do so, remove containers from path of fire.
  - Equipment should be thoroughly decontaminated after use.
- When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 800 metres in all directions.

### FIRE/EXPLOSION HAZARD

- Non combustible.
  - Not considered to be a significant fire risk.
  - Acids may react with metals to produce hydrogen, a highly flammable and explosive gas.
  - Heating may cause expansion or decomposition leading to violent rupture of containers.
  - May emit corrosive, poisonous fumes. May emit acrid smoke.
- Decomposition may produce toxic fumes of phosphorus oxides (POx)  
sulfur oxides (SOx).

### FIRE INCOMPATIBILITY

None known.

### HAZCHEM

2R

### Personal Protective Equipment

#### PERSONAL PROTECTION EQUIPMENT

Breathing apparatus.  
Chemical splash suit.

continued...

# DENTSPLY DE TREY CONDITIONER 36 / DE TREY ETCH

ChemWatch Material Safety Data Sheet  
Issue Date: Mon 18-Oct-2004

CHEMWATCH 4620-6  
CD 2004/3 Page 5 of 13

## Section 6 - ACCIDENTAL RELEASE MEASURES

### EMERGENCY PROCEDURES

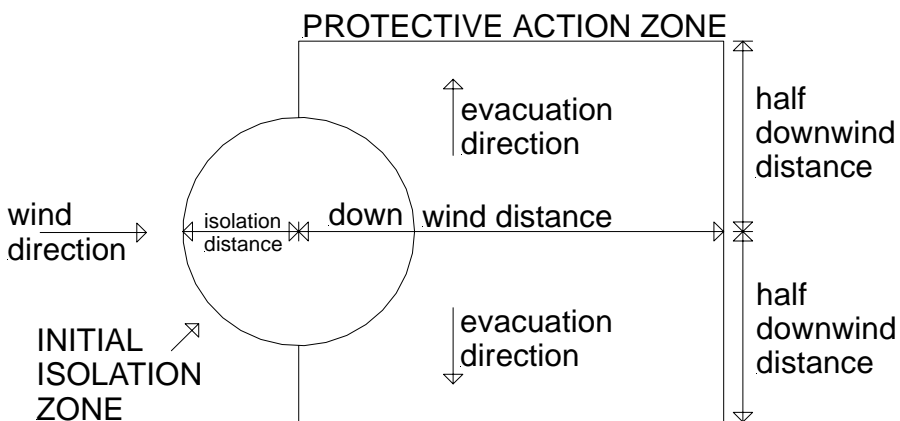
#### MINOR SPILLS

- Clean up all spills immediately.
- Avoid breathing vapours/ aerosols/ or dusts and avoid contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.
- Place in a suitable labelled container for waste disposal.

#### MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.
- Stop leak if safe to do so.
- Contain spill with sand, earth or vermiculite.
- Collect recoverable product into labelled containers for recycling.
- Neutralise/decontaminate residue.
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.
- If contamination of drains or waterways occurs, advise emergency services.

#### PROTECTIVE ACTIONS FOR SPILL



From IERG (Canada/Australia)

Isolation Distance	25 metres
Downwind Protection Distance	250 metres
IERG Number	37

#### FOOTNOTES

- 1 PROTECTIVE ACTION ZONE is defined as the area in which people are at risk of harmful exposure. This zone assumes that random changes in wind direction confines the vapour plume to an area within 30 degrees on either side of the

continued...

# DENTSPLY DE TREY CONDITIONER 36 / DE TREY ETCH

ChemWatch Material Safety Data Sheet  
Issue Date: Mon 18-Oct-2004

CHEMWATCH 4620-6  
CD 2004/3 Page 6 of 13

---

## Section 6 - ACCIDENTAL RELEASE MEASURES ...

---

- predominant wind direction, resulting in a crosswind protective action distance equal to the downwind protective action distance.
- 2 PROTECTIVE ACTIONS should be initiated to the extent possible, beginning with those closest to the spill and working away from the site in the downwind direction. Within the protective action zone a level of vapour concentration may exist resulting in nearly all unprotected persons becoming incapacitated and unable to take protective action and/or incurring serious or irreversible health effects.
  - 3 INITIAL ISOLATION ZONE is determined as an area, including upwind of the incident, within which a high probability of localised wind reversal may expose nearly all persons without appropriate protection to life-threatening concentrations of the material.
  - 4 SMALL SPILLS involve a leaking package of 200 litres (55 US gallons) or less, such as a drum (jerrican or box with inner containers). Larger packages leaking less than 200 litres and compressed gas leaking from a small cylinder are also considered "small spills".  
LARGE SPILLS involve many small leaking packages or a leaking package of greater than 200 litres, such as a cargo tank, portable tank or a "one-tonne" compressed gas cylinder.
  - 5 Guide 154 is taken from the US DOT emergency response guide book.
  - 6 IERG information is derived from CANUTEC - Transport Canada.

**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.
- Avoid contact with moisture.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately. Launder contaminated clothing before re-use.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

### SUITABLE CONTAINER

DO NOT use aluminium or galvanised containers.  
Check regularly for spills and leaks.

continued...

# DENTSPLY DE TREY CONDITIONER 36 / DE TREY ETCH

ChemWatch Material Safety Data Sheet  
Issue Date: Mon 18-Oct-2004

CHEMWATCH 4620-6  
CD 2004/3 Page 7 of 13

## Section 7 - HANDLING AND STORAGE ...

### STORAGE INCOMPATIBILITY

Reacts vigorously with alkalis.  
Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air.  
Reacts with mild steel and zinc to produce hydrogen (H<sub>2</sub>).

### 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.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

## 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
Australian Exposure Standards	Phosphoric acid		1		3	
Australian Exposure Standards	Silica - Amorphous, Fume (thermally generated) (respirable dust) (g)		2			
Australian Exposure Standards	Silica - Amorphous, Fumed silica (respirable dust)		2			

Not available. Refer to individual constituents.

### EXPOSURE STANDARDS FOR MIXTURE

"Worst Case" computer-aided prediction of spray/ mist or fume/ dust components and concentration:.

Composite Exposure Standard for Mixture (TWA) (:1.0741 mg/m<sup>3</sup>.  
Operations which produce a spray/mist or fume/dust, introduce particulates to the breathing zone.

If the breathing zone concentration of ANY of the components listed below is exceeded, "Worst Case" considerations deem the individual to be overexposed.  
Component Breathing Zone ppm Breathing Zone mg/m<sup>3</sup> Mixture Conc (%)

Component Breathing Zone Mixture Conc

continued...

# DENTSPLY DE TREY CONDITIONER 36 / DE TREY ETCH

ChemWatch Material Safety Data Sheet  
Issue Date: Mon 18-Oct-2004

CHEMWATCH 4620-6  
CD 2004/3 Page 8 of 13

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION ...

	(mg/m <sup>3</sup> )	(%)
phosphoric acid	0.9259	35.0
silica amorphous	0.1481	5.6

### INGREDIENT DATA

#### PHOSPHORIC ACID:

TLV TWA: 1 mg/m<sup>3</sup> [ACGIH]  
TLV STEL: 3 mg/m<sup>3</sup> [ACGIH]  
PEL TWA: 1 mg/m<sup>3</sup> [OSHA Z1]  
TLV TWA: 1 mg/m<sup>3</sup>; STEL: 3 mg/m<sup>3</sup>  
ES TWA: 1 mg/m<sup>3</sup>; STEL: 3 mg/m<sup>3</sup>  
OES STEL: 2 mg/m<sup>3</sup>  
IDLH Level: 1000 mg/m<sup>3</sup>

The saturated vapour concentration of phosphoric acid exceeds the TLV.

The TLV-TWA is based by analogy from comparable experience and data for sulfuric acid. Exposure at or below this limit is thought to prevent throat irritation amongst unacclimatised workers.

Fumes of phosphorus pentoxide at concentrations between 0.8 and 5.4 mg/m<sup>3</sup> were reported to be noticeable but not uncomfortable whilst concentrations between 3.6 and 11.3 mg/m<sup>3</sup> produced coughing in unacclimatised workers but were tolerable. Concentrations of 100 mg/m<sup>3</sup> were unbearable except in injured workers.

#### SILICA AMORPHOUS:

containing no asbestos and <1% crystalline silica  
TLV TWA: 10 mg/m<sup>3</sup> total dust  
TLV TWA: 2 mg/m<sup>3</sup> respirable dust (fumed silica)  
ES TWA: 2 mg/m<sup>3</sup> respirable dust (fumed silica)  
OES TWA: 6 mg/m<sup>3</sup> total inhalable dust  
OES TWA: 2.4 mg/m<sup>3</sup> respirable dust  
IDLH Level: 3000 mg/m<sup>3</sup>

### PERSONAL PROTECTION

#### EYE

- Chemical goggles.
- Full face shield.
- Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

#### HANDS/FEET

Wear chemical protective gloves, eg. PVC.  
Wear safety footwear or safety gumboots, eg. Rubber.

#### OTHER

- Overalls.
- PVC Apron.
- PVC protective suit may be required if exposure severe.
- Eyewash unit.

continued...

# DENTSPLY DE TREY CONDITIONER 36 / DE TREY ETCH

ChemWatch Material Safety Data Sheet  
Issue Date: Mon 18-Oct-2004

CHEMWATCH 4620-6  
CD 2004/3 Page 9 of 13

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION ...

- Ensure there is ready access to a safety shower.

### 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:.

Substance

phosphoric acid	
NAT+NEOPR+NITRILE	A
NATURAL RUBBER	A
NATURAL+NEOPRENE	A
NEOPRENE/NATURAL	A
NITRILE	A
NITRILE+PVC	A
PE	A
PVC	A
SARANEX-23	A
NEOPRENE	A

\* 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.

### RESPIRATOR

Selection of the Class and Type of respirator will depend upon the level of  
breathing zone contaminant and the chemical nature of the contaminant.  
Protection Factors (defined as the ratio of contaminant outside and inside the  
mask) may also be important.

Breathing Zone Level ppm (volume)	Maximum Protection Factor	Half-face Respirator	Full-Face Respirator
1000	10	B-AUS P	-
1000	50	-	B-AUS P
5000	50	Airline *	-
5000	100	-	B-2 P
10000	100	-	B-3 P
	100+		Airline**

\* - Continuous Flow \*\* - Continuous-flow or positive pressure demand.

The local concentration of material, quantity and conditions of use determine  
the type of personal protective equipment required. For further information  
consult site specific CHEMWATCH data (if available), or your Occupational

continued...

# DENTSPLY DE TREY CONDITIONER 36 / DE TREY ETCH

ChemWatch Material Safety Data Sheet  
Issue Date: Mon 18-Oct-2004

CHEMWATCH 4620-6  
CD 2004/3 Page 10 of 13

---

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION ...

---

Health and Safety Advisor.

### ENGINEERING CONTROLS

Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection. An approved self contained breathing apparatus (SCBA) may be required in some situations. Provide adequate ventilation in warehouse or closed storage area.

---

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

---

### APPEARANCE

Blue, odourless gel; partly mixes with water.

### PHYSICAL PROPERTIES

Liquid.  
Corrosive.  
Acid.

Molecular Weight: Not Applicable  
Melting Range (°C): Not Available  
Solubility in water (g/L): Partly Miscible  
pH (1% solution): Not Available  
Volatile Component (%vol): Not Available  
Relative Vapour Density (air=1): Not Available  
Lower Explosive Limit (%): Not Available  
Autoignition Temp (°C): Not Available  
State: Gel

Boiling Range (°C): 213  
Specific Gravity (water=1): 1.88  
pH (as supplied): 1.9  
Vapour Pressure (kPa): 2.3  
Evaporation Rate: Not Available  
Flash Point (°C): Not Applicable  
Upper Explosive Limit (%): Not Available  
Decomposition Temp (°C): Not Available

---

## Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

---

### CONDITIONS CONTRIBUTING TO INSTABILITY

Contact with alkaline material liberates heat.

---

## Section 11 - TOXICOLOGICAL INFORMATION

---

### POTENTIAL HEALTH EFFECTS

#### ACUTE HEALTH EFFECTS

continued...

# DENTSPLY DE TREY CONDITIONER 36 / DE TREY ETCH

ChemWatch Material Safety Data Sheet  
Issue Date: Mon 18-Oct-2004

CHEMWATCH 4620-6  
CD 2004/3 Page 11 of 13

---

## Section 11 - TOXICOLOGICAL INFORMATION ...

---

### SWALLOWED

There is some evidence to suggest that this material can cause, if swallowed once, irreversible damage of organs.  
The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion.

### EYE

The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating.  
If applied to the eyes, this material causes severe eye damage.  
The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

### SKIN

The material can produce chemical burns following direct contact with the skin.  
The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration.

### INHALED

Not normally a hazard due to non-volatile nature of product.  
The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.  
High concentrations cause inflamed airways and watery swelling of the lungs with oedema.

### CHRONIC HEALTH EFFECTS

Repeated or prolonged exposure to acids may result in the erosion of teeth, swelling and/or ulceration of mouth lining. Irritation of airways to lung, with cough, and inflammation of lung tissue often occurs. Chronic exposure may inflame the skin or conjunctiva. Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnea, cough and mucous production. There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.

continued...

# DENTSPLY DE TREY CONDITIONER 36 / DE TREY ETCH

ChemWatch Material Safety Data Sheet  
Issue Date: Mon 18-Oct-2004

CHEMWATCH 4620-6  
CD 2004/3 Page 12 of 13

## Section 11 - TOXICOLOGICAL INFORMATION ...

### Dentsply De Trey Conditioner 36 / De Trey Etch

Not available. Refer to individual constituents.  
unless otherwise specified data extracted from RTECS - Register of Toxic Effects  
of Chemical Substances

#### PHOSPHORIC ACID:

##### TOXICITY

Unreported (human) LDLo: 220 mg/kg

Oral (rat) LD50: 1530 mg/kg

phosphoric acid ( 85%)

Oral (rat) LD50: 3500 mg/kg\*

Dermal (rabbit) LD50: >1260 mg/kg\*

##### IRRITATION

Skin (rabbit):595 mg/24h - SEVERE

Eye (rabbit): 119 mg - SEVERE

[Monsanto]\*

#### SILICA AMORPHOUS:

##### TOXICITY

Oral (rat) LD50: 3160 mg/kg

Dermal (rabbit) LD50: >5000 mg/kg \*

Inhalation (rat) LC50: >0.139 mg/l/14h \*

##### IRRITATION

Skin (rabbit): non-irritating \*

Eye (rabbit): non-irritating \*

\* [Grace]

Reports indicate high/prolonged exposures to amorphous silicas induced lung  
fibrosis in experimental animals; in some experiments these effects were  
reversible. [PATTYS]

The substance is classified by IARC as Group 3:

NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing.

## Section 12 - ECOLOGICAL INFORMATION

Prevent, by any means available, spillage from entering drains or water  
courses.

The principal problems of phosphate contamination of the environment relates to  
eutrophication processes in lakes and ponds. Phosphorus is an essential plant  
nutrient and is usually the limiting nutrient for blue-green algae. A lake  
undergoing eutrophication shows a rapid growth of algae in surface waters.  
Planktonic algae cause turbidity and flotation films. Shore algae cause ugly  
muddying, films and damage to reeds. Decay of these algae causes oxygen  
depletion in the deep water and shallow water near the shore. The process is  
self-perpetuating because anoxic conditions at the sediment/water interface  
causes the release of more adsorbed phosphates from the sediment. The growth of  
algae produces undesirable effects on the treatment of water for drinking  
purposes, on fisheries, and on the use of lakes for recreational purposes.  
DO NOT discharge into sewer or waterways.

## Section 13 - DISPOSAL CONSIDERATIONS

- Consult manufacturer for recycling options and recycle where possible .
  - Consult State Land Waste Management Authority for disposal.
  - Incinerate residue at an approved site.
  - Recycle containers if possible, or dispose of in an authorised landfill.
- Puncture containers to prevent re-use and bury at an authorised landfill.

continued...

# DENTSPLY DE TREY CONDITIONER 36 / DE TREY ETCH

ChemWatch Material Safety Data Sheet  
Issue Date: Mon 18-Oct-2004

CHEMWATCH 4620-6  
CD 2004/3 Page 13 of 13

---

## Section 13 - DISPOSAL CONSIDERATIONS ...

---

---

## Section 14 - TRANSPORTATION INFORMATION

---

Shipping Name:  
PHOSPHORIC ACID  
Dangerous Goods Class: 8  
UN/NA Number: 1805  
ADR Number: 80  
Packing Group: III  
Labels Required: corrosive  
Additional Shipping Information:  
International Transport Regulations:  
IMO: 8

### HAZCHEM

2R

---

## Section 15 - REGULATORY INFORMATION

---

### POISONS SCHEDULE

None

### REGULATIONS

phosphoric acid (CAS: 7664-38-2) is found on the following regulatory lists:  
Australian Inventory of Chemical Substances (AICS)

silica amorphous (CAS: 7631-86-9) is found on the following regulatory lists:  
Australian Inventory of Chemical Substances (AICS)

silica amorphous (CAS: 112945-52-5) is found on the following regulatory lists:  
Australian Inventory of Chemical Substances (AICS)

---

## Section 16 - OTHER INFORMATION

---

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.

Issue Date: Mon 18-Oct-2004  
Print Date: Fri 12-Nov-2004