

# DENTSPLY DYRACTCEM LIQUID

ChemWatch Material Safety Data Sheet  
Issue Date: Wed 22-Sep-2004

CHEMWATCH 4613-49  
CD 2004/3 Page 1 of 8

---

## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

---

### PRODUCT NAME

DENTSPLY DYRACTCEM LIQUID

### SYNONYMS

! 04/01

### PRODUCT USE

Compomer cement for dental use.

### 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. NON-DANGEROUS GOODS.**

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

### POISONS SCHEDULE

None

### RISK

Irritating to eyes, respiratory system and skin.  
Cumulative effects may result following exposure\*.  
Possible respiratory and skin sensitiser\*.  
\* (limited evidence)

### SAFETY

Do not breathe gas/fumes/vapour/spray.  
Avoid contact with skin.  
Wear eye/face protection.  
In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.

continued...

# DENTSPLY DYRACTCEM LIQUID

ChemWatch Material Safety Data Sheet  
Issue Date: Wed 22-Sep-2004

CHEMWATCH 4613-49  
CD 2004/3 Page 2 of 8

---

## Section 2 - HAZARDS IDENTIFICATION ...

---

---

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

---

NAME	CAS RN	%
methacrylate		30-60
acrylates		30-60

---

## 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:

- 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.
- 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 or hair contact occurs:

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

### NOTES TO PHYSICIAN

Treat symptomatically.

continued...

# DENTSPLY DYRACTCEM LIQUID

ChemWatch Material Safety Data Sheet  
Issue Date: Wed 22-Sep-2004

CHEMWATCH 4613-49  
CD 2004/3 Page 3 of 8

---

## 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 breathing apparatus plus protective gloves for fire only.
- Prevent, by any means available, spillage from entering drains or water courses.
- 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.

### FIRE/EXPLOSION HAZARD

- Non combustible.
  - Not considered a significant fire risk, however containers may burn.
- Decomposition may produce toxic fumes of  
carbon dioxide (CO<sub>2</sub>)  
sulfur oxides (SO<sub>x</sub>)  
other pyrolysis products typical of burning organic material  
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

### Personal Protective Equipment

PERSONAL PROTECTION EQUIPMENT  
Gas tight chemical resistant suit.  
Limit exposure duration to 1 BA set - 30 mins.

---

## Section 6 - ACCIDENTAL RELEASE MEASURES

---

### EMERGENCY PROCEDURES

continued...

# DENTSPLY DYRACTCEM LIQUID

ChemWatch Material Safety Data Sheet  
Issue Date: Wed 22-Sep-2004

CHEMWATCH 4613-49  
CD 2004/3 Page 4 of 8

---

## 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.
- Place spilled material in clean, dry, sealed container.
- Flush spill area with water.

### MAJOR SPILLS

Minor hazard.

- Clear area of personnel.
- Alert Fire Brigade and tell them location and nature of hazard.
- Control personal contact by using protective equipment as required.
- Prevent spillage from entering drains or water ways.
- Contain spill with sand, earth or vermiculite.
- Collect recoverable product into labelled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal.
- Wash area and prevent runoff into drains or waterways.
- If contamination of drains or waterways occurs, advise emergency services.

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

---

## Section 7 - HANDLING AND STORAGE

---

### PROCEDURE FOR HANDLING

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- When handling DO NOT eat, drink or smoke.
- Always wash hands with soap and water after handling.
- Avoid physical damage to containers.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.

### SUITABLE CONTAINER

Store in original containers.

### STORAGE INCOMPATIBILITY

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.

continued...

# DENTSPLY DYRACTCEM LIQUID

ChemWatch Material Safety Data Sheet  
Issue Date: Wed 22-Sep-2004

CHEMWATCH 4613-49  
CD 2004/3 Page 5 of 8

---

## Section 7 - HANDLING AND STORAGE ...

---

- 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

Not available. Refer to individual constituents.

### PERSONAL PROTECTION

#### EYE

- Safety glasses with side shields
- Chemical goggles.
- 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

NOTE: The material may produce skin sensitisation in predisposed individuals.

Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.

#### OTHER

- Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.
- Eye wash unit.

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 Health and Safety Advisor.

### ENGINEERING CONTROLS

General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in special circumstances. If risk of overexposure exists, wear approved respirator. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection. Provide adequate ventilation in warehouses and enclosed storage areas.

continued...

# DENTSPLY DYRACTCEM LIQUID

ChemWatch Material Safety Data Sheet  
Issue Date: Wed 22-Sep-2004

CHEMWATCH 4613-49  
CD 2004/3 Page 6 of 8

---

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

---

### APPEARANCE

Colourless liquid with a characteristic odour; does not mix with water.

### PHYSICAL PROPERTIES

Liquid.  
Does not mix with water.

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

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

---

## Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

---

### CONDITIONS CONTRIBUTING TO INSTABILITY

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

---

## Section 11 - TOXICOLOGICAL INFORMATION

---

### POTENTIAL HEALTH EFFECTS

#### ACUTE HEALTH EFFECTS

##### SWALLOWED

(No Oral LD50, any animal species) 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 (eg. 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). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.

##### EYE

This material can cause eye irritation and damage in some persons.

continued...

# DENTSPLY DYRACTCEM LIQUID

ChemWatch Material Safety Data Sheet  
Issue Date: Wed 22-Sep-2004

CHEMWATCH 4613-49  
CD 2004/3 Page 7 of 8

---

## Section 11 - TOXICOLOGICAL INFORMATION ...

---

### SKIN

This material can cause inflammation of the skin on contact in some persons.

The material may accentuate any pre-existing dermatitis condition. Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions.

### INHALED

The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

### CHRONIC HEALTH EFFECTS

The cured solid material is inert and represents a low order of hazard. 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 is some evidence that inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population. There is limited evidence that, skin contact with this product is more likely to cause a sensitisation reaction in some persons compared to the general population.

### Dentsply DyractCem Liquid

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

---

## Section 12 - ECOLOGICAL INFORMATION

---

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.

continued...

# DENTSPLY DYRACTCEM LIQUID

ChemWatch Material Safety Data Sheet  
Issue Date: Wed 22-Sep-2004

CHEMWATCH 4613-49  
CD 2004/3 Page 8 of 8

---

## Section 13 - DISPOSAL CONSIDERATIONS ...

---

Puncture containers to prevent re-use and bury at an authorised landfill.

---

## Section 14 - TRANSPORTATION INFORMATION

---

Shipping Name:

None

Dangerous Goods Class: None

UN/NA Number: None

ADR Number: None

Packing Group: None

Labels Required:

Additional Shipping Information:

International Transport Regulations:

IMO: None

## HAZCHEM

None

---

## Section 15 - REGULATORY INFORMATION

---

## POISONS SCHEDULE

None

## REGULATIONS

---

## 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: Wed 22-Sep-2004

Print Date: Wed 29-Sep-2004