

# EARTH CHOICE AUTO DISHWASHING TABLET

Chemwatch Material Safety Data Sheet  
Issue Date: 6-Jul-2009  
XC9317EC

CHEMWATCH 21-8186  
Version No:2.0  
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## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### PRODUCT NAME

EARTH CHOICE AUTO DISHWASHING TABLET

### SYNONYMS

"Product Code: 203926"

### PRODUCT USE

» Used according to manufacturer's directions.  
Dishwashing tablet.

### SUPPLIER

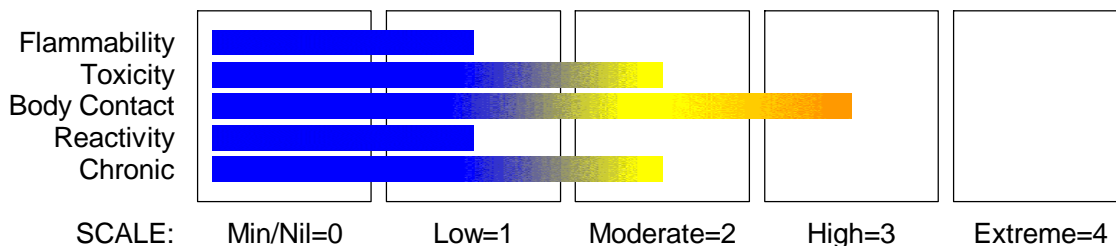
Company: PZ Cussons Pty Ltd  
Address:  
282- 300 Hammond Road  
Dandenong  
VIC, 3175  
AUS  
Telephone: +61 3 9794 3333  
Fax: +61 3 9794 3301

## Section 2 - HAZARDS IDENTIFICATION

### STATEMENT OF HAZARDOUS NATURE

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

### CHEMWATCH HAZARD RATINGS



SCALE: Min/Nil=0 Low=1 Moderate=2 High=3 Extreme=4

### POISONS SCHEDULE

None

### RISK

Risk Codes  
R20/22  
R36/37/38

#### Risk Phrases

- » Harmful by inhalation and if swallowed.
- » Irritating to eyes respiratory system and skin.

### SAFETY

Safety Codes  
S36  
S401

#### Safety Phrases

- » Wear suitable protective clothing.
- » To clean the floor and all objects contaminated by this material use water and detergent.
- » Keep away from food drink and animal feeding stuffs.
- » If swallowed IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).

S13  
S46

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
builders		30-60
citric acid	77-92-9	5-15
bleaching agent		1-10
zinc sulfate	7733-02-0	<1
other ingredients at levels determined not to be hazardous		balance

continued...

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## Section 4 - FIRST AID MEASURES

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### 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.

### 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.

### SKIN

- » If skin contact occurs:
- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).

### INHALED

- » - If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.

### NOTES TO PHYSICIAN

- » Treat symptomatically.
- For acute or short-term repeated exposures to highly alkaline materials:
- Respiratory stress is uncommon but present occasionally because of soft tissue edema.
  - Unless endotracheal intubation can be accomplished under direct vision, cricothyroidotomy or tracheotomy may be necessary.

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## Section 5 - FIRE FIGHTING MEASURES

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### EXTINGUISHING MEDIA

- » - Water spray or fog.
- Foam.

### FIRE FIGHTING

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

### FIRE/EXPLOSION HAZARD

- » - Combustible solid which burns but propagates flame with difficulty.
  - Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust (420 micron or less) may burn rapidly and fiercely if ignited.; once initiated larger particles up to 1400 microns diameter will contribute to the propagation of an explosion.
- Combustion products include: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), silicon dioxide (SiO<sub>2</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

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## Section 6 - ACCIDENTAL RELEASE MEASURES

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### EMERGENCY PROCEDURES

#### MINOR SPILLS

- » - Remove all ignition sources.
- Clean up all spills immediately.

#### MAJOR SPILLS

- » Moderate hazard.
- CAUTION: Advise personnel in area.
- Alert Emergency Services and tell them location and nature of hazard.

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

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## Section 7 - HANDLING AND STORAGE

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### PROCEDURE FOR HANDLING

- » - Avoid all personal contact, including inhalation.
  - Wear protective clothing when risk of exposure occurs.
- Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.

### SUITABLE CONTAINER

- » - DO NOT use aluminium or galvanised containers.
- Polyethylene or polypropylene container.
- Check all containers are clearly labelled and free from leaks.

### STORAGE INCOMPATIBILITY

- » - In presence of moisture, the material is corrosive to aluminium, zinc and tin producing highly flammable hydrogen gas.
- Avoid strong acids, acid chlorides and acid anhydrides..
- Avoid contact with copper, aluminium and their alloys.

### STORAGE REQUIREMENTS

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

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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### EXPOSURE CONTROLS

The following materials had no OELs on our records

- citric acid: CAS:77- 92- 9
- zinc sulfate: CAS:7733- 02- 0 CAS:7446- 19- 7 CAS:7446- 20- 0

### PERSONAL PROTECTION

#### RESPIRATOR

Particulate

#### EYE

- » No special equipment for minor exposure i.e. when handling small quantities.

#### HANDS/FEET

- » Suitability and durability of glove type is dependent on usage. Factors such as:
  - frequency and duration of contact,
  - chemical resistance of glove material,.

Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.

- polychloroprene
- nitrile rubber.

No special equipment needed when handling small quantities.

OTHERWISE: Wear chemical protective gloves, eg.

#### OTHER

- » No special equipment needed when handling small quantities.

OTHERWISE:

- Overalls.
- Barrier cream.

- » - Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.
- The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).

### ENGINEERING CONTROLS

- » - Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.
- Exhaust ventilation should be designed to prevent accumulation and recirculation of particulates in the workplace.

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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

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### APPEARANCE

Two layer tablet (white and blue) with a white PEG insert; miscible with water.

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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

### PHYSICAL PROPERTIES

Solid.  
Mixes with water.  
Alkaline.

Molecular Weight: Not Available  
Melting Range (°C): Not Available  
Solubility in water (g/L): 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: Solid

Boiling Range (°C): Not Available  
Specific Gravity (water=1): Not Available  
pH (as supplied): Not Available  
Vapour Pressure (kPa): Not Available  
Evaporation Rate: Not Available  
Flash Point (°C): >100  
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.  
*For incompatible materials - refer to Section 7 - Handling and Storage.*

## Section 11 - TOXICOLOGICAL INFORMATION

### POTENTIAL HEALTH EFFECTS

#### ACUTE HEALTH EFFECTS

» Harmful by inhalation and if swallowed.  
» Irritating to eyes, respiratory system and skin.

#### CHRONIC HEALTH EFFECTS

» Not applicable.

### TOXICITY AND IRRITATION

» unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

» 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. The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis.

#### CITRIC ACID:

» unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

#### TOXICITY

Oral (rat) LD50: 3000 mg/kg

#### IRRITATION

Skin (rabbit): 500 mg/24h - Mild  
Eye (rabbit): 0.75 mg/24h- SEVERE

» The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis.

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.

#### ZINC SULFATE:

» unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

#### TOXICITY

Oral (human) TDLo: 45 mg/kg/7d- C  
Oral (human) TDLo: 106 mg/kg  
Oral (man) TDLo: 180 mg/kg/6w- I  
Oral (rat) LD50: 2949 mg/kg  
Unreported (man) LDLo: 221 mg/kg  
Oral (rat) LD50: 1260 mg/kg  
Intraperitoneal (rat) LD50: 200 mg/kg  
Oral (mouse) LD50: 200 mg/kg  
Intraperitoneal (mouse) LD50: 75 mg/kg

#### IRRITATION

Eye (rabbit): 0.42 mg Moderate  
Nil Reported

» Exposure may produce irreversible effects\*.

NOTE: Substance has been shown to be mutagenic in at least one assay, or belongs to a family of chemicals producing damage or change to cellular DNA. Equivocal tumorigenic agent by RTECS criteria.

for zinc sulfate heptahydrate

Sleep, ataxia, respiratory stimulation, somnolence, coma, diarrhoea, changes in endocrine pancreas recorded.

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## Section 12 - ECOLOGICAL INFORMATION

No data

## Section 13 - DISPOSAL CONSIDERATIONS

- » - Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.
- 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.
- Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.

## Section 14 - TRANSPORTATION INFORMATION

HAZCHEM: None (ADG6)

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

## Section 15 - REGULATORY INFORMATION

**POISONS SCHEDULE: None**

### REGULATIONS

Regulations for ingredients

Earth Choice Auto Dishwashing Tablet (CAS: None):

No regulations applicable

citric acid (CAS: 77-92-9) is found on the following regulatory lists;

Australia High Volume Industrial Chemical List (HVICL)

Australia Inventory of Chemical Substances (AICS)

Australia Therapeutic Goods Administration (TGA) Substances that may be used as active ingredients in Listed medicines

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

GMP

GESAMP/EHS Composite List of Hazard Profiles - Hazard evaluation of substances transported by ships

IMO IBC Code Chapter 17: Summary of minimum requirements

IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk

IMO Provisional Categorization of Liquid Substances - List 1: Pure or technically pure products

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

OECD Representative List of High Production Volume (HPV) Chemicals

zinc sulfate (CAS: 7733-02-0) is found on the following regulatory lists;

Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - inorganic chemicals)

Australia - Australian Capital Territory Environment Protection Regulation Pollutants entering waterways - Agricultural uses (Stock)

Australia - Australian Capital Territory Environment Protection Regulation Pollutants entering waterways - Domestic water quality

Australia Hazardous Substances

Australia High Volume Industrial Chemical List (HVICL)

Australia Inventory of Chemical Substances (AICS)

Australia National Pollutant Inventory

Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Appendix E (Part 2)

Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Appendix F (Part 3)

Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 4

Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 6

Australia Therapeutic Goods Administration (TGA) Substances that may be used as active ingredients in Listed medicines

OECD Representative List of High Production Volume (HPV) Chemicals

zinc sulfate (CAS: 7446-19-7) is found on the following regulatory lists;

Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - inorganic chemicals)

Australia - Australian Capital Territory Environment Protection Regulation Pollutants entering waterways - Agricultural uses (Stock)

Australia - Australian Capital Territory Environment Protection Regulation Pollutants entering waterways - Domestic water quality

Australia Hazardous Substances

Australia High Volume Industrial Chemical List (HVICL)

Australia Inventory of Chemical Substances (AICS)

Australia National Pollutant Inventory

Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Appendix E (Part 2)

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Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 6

Australia Therapeutic Goods Administration (TGA) Substances that may be used as active ingredients in Listed medicines

OECD Representative List of High Production Volume (HPV) Chemicals

zinc sulfate (CAS: 7446-20-0) is found on the following regulatory lists;

Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - inorganic chemicals)

Australia - Australian Capital Territory Environment Protection Regulation Pollutants entering waterways - Agricultural uses (Stock)

continued...

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Section 15 - REGULATORY INFORMATION

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Australia - Australian Capital Territory Environment Protection Regulation Pollutants entering waterways - Domestic water quality  
Australia Hazardous Substances  
Australia High Volume Industrial Chemical List (HVICL)  
Australia Inventory of Chemical Substances (AICS)  
Australia National Pollutant Inventory  
Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Appendix E (Part 2)  
Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Appendix F (Part 3)  
Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 4  
Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 6  
Australia Therapeutic Goods Administration (TGA) Substances that may be used as active ingredients in Listed medicines  
OECD Representative List of High Production Volume (HPV) Chemicals

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## Section 16 - OTHER INFORMATION

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### INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name	CAS
zinc sulfate	7733- 02- 0, 7446- 19- 7, 7446- 20- 0

» 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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*This is the end of the MSDS.*