

MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT NAME: **PULIJET**
OTHER NAMES: Not available
RECOMMENDED USE: Disinfectant for the dental profession.

SUPPLIER NAME: **CATTANI AUSTRALIA**
ADDRESS: 280 Dundas Street, Thornbury,
Victoria, Australia, 3071

TELEPHONE NUMBER: +61 3 9484 1120

EMERGENCY TELEPHONE NUMBER: +61 3 9484 1120, Business Hours
0403 244 455, After Hours

SECTION 2 – HAZARDS IDENTIFICATION

Statement of Hazardous Nature of Product: This product is classified as Hazardous according to criteria of the National Occupational Health and Safety Commission. It is not a dangerous good according to the Australian Dangerous Goods (ADG) Code. The product may be harmful if swallowed or when it comes into contact with the skin or eyes.

Risk Phrases: R36/38 – Irritating to eyes and skin.

Safety Phrases: S2 - Keep out of reach of children.
S23 - Do not breathe vapour.
S24/25 - Avoid contact with skin and eyes.
S26 - If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre (Phone in Australia 13 1126; New Zealand 0800 764 766) or a doctor, or for at least 15 minutes.
S28 - If on skin, remove any contaminated clothing, wash skin thoroughly with soap and water, then methylated spirits if available. Contact the Poisons Information Centre or a doctor.
S37/39 - Wear suitable gloves and eye/face protection.
S46 - If swallowed, contact a doctor or Poisons Information Centre (Phone in Australia 13 1126; New Zealand 0800 764 766) immediately and show this container or label.

UN NUMBER: None Allocated
HAZCHEM CODE: None Allocated
DANGEROUS GOODS CLASS/SUBSIDIARY RISK: None Allocated
POISONS SCHEDULE NUMBER: S5

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SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	CAS NUMBER	PROPORTION
2-Butoxyethanol	112-34-5	< 10%
Sodium o-phenylphenolateTetrahydrate (61.2%as o-phenyl phenol)	132-27-4	< 5%
p-tert-pentylphenol	80-46-6	< 3%
Sodium Hydroxide	1310-73-2	< 0.5%
Hydrophilic Solvent		< 15%
Surfactants		< 1%
Water	7732-18-5	Balance

SECTION 4 – FIRST AID MEASURES

INGESTION: The material has a pH value of 12.3 and is expected to irritate the mouth, oesophagus and gastro-intestinal tract if swallowed. Irritation may be exacerbated in young and sensitive skin. If swallowed do not induce vomiting. Flush mouth with copious amounts of water and give a glass of water to drink. Contact a doctor or Poisons Information Centre immediately (Phone in Australia 13 1126; New Zealand 0800 764 766). Take this MSDS with you.

EYE: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre (Phone in Australia 13 1126; New Zealand 0800 764 766) or a doctor, or for at least 15 minutes. Take the package or this MSDS with you.

SKIN CONTACT: Brief contact may cause mild irritation. Prolonged contact, as with clothing wetted with the material, may cause severe irritation and discomfort, seen as local redness and swelling. Irritation may be exacerbated in young and sensitive skin. If skin contact has occurred remove any contaminated clothing, wash skin thoroughly with soap and water, then methylated spirits if available as the product contains phenols. Contact the Poisons Information Centre or a doctor. Contains 2-Butoxyethanol which is listed by the NOHSC as “ Absorption through the skin may be a significant source of exposure” .

INHALATION: Do not inhale this product. During routine use of this material, inhalation is not expected to be a means of exposure. If used in a concentrated rather than diluted form that is aspirated and vapours or mists are generated, they are expected to cause irritation to the respiratory tract and mucous membranes. If affected, remove the patient from exposure, if safe to do so. Lay patient down in a well-ventilated area and reassure them. If unconscious, commence artificial respiration and seek immediate medical assistance.

FIRST AID FACILITIES: Eye wash fountain and safety showers are recommended.

ADVICE TO DOCTOR: Treat symptomatically. This product is classified as a Schedule 5 Poison. Caution, the product contains substituted phenols and if ingested the person should be treated for phenolic ingestion.

SECTION 5 – FIRE FIGHTING MEASURES

FIRE: This product is not flammable. Keep containers cool with water spray.

EXPLOSION: No information to indicate that the product is an explosion hazard.

FIRE EXTINGUISHING MEDIA: Use extinguishing media appropriate for surrounding fire. Use foam, dry chemical or carbon dioxide if product is involved.

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SECTION 5 – FIRE FIGHTING MEASURES cont.

COMBUSTION HAZARDS: Combustion will provide oxides of carbon. Heating of solution may release phenol vapours. Avoid breathing in combustion products.

PROTECTIVE EQUIPMENT: In the event of a fire, wear full protective clothing and self-contained breathing equipment with full-face piece operated in the pressure demand or other positive pressure mode.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTION: Wear gloves, goggles or glasses, respirators, boots and full-length protective clothing. For large spills full protective clothing, including self-contained breathing apparatus is recommended.

EMERGENCY PROCEDURES: Extinguish and/or remove all sources of ignition. Contain the spill. Absorb with a proprietary absorbent material, sand or earth. **Caution:** spilled material will be slippery. Place used absorbent in suitable sealed containers and follow local and state regulations for disposal of waste. Clean spill area with detergent and water. Do not allow product to enter drains, sewers or watercourses - inform local authorities if this occurs.

CLEANING PROCEDURES: Having contained the spill, collect all material quickly as mentioned above. Personnel must wear gloves, goggles or glasses, respirators, boots and full-length protective clothing during cleaning procedures. Wash contaminated area and objects with detergent and water after spill has been cleared.

SECTION 7 – HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:

Avoid contact with the product by using appropriate protective equipment such as gloves, glasses or goggles and full-length clothing. Keep containers tightly closed when not in use. This product is miscible with water. Prevent material from entering waterways, drains or sewers. If there is a chance of splashing when mixing or using the material, a full-face shield should be used.

CONDITIONS FOR SAFE STORAGE:

Store in a cool, dry and well-ventilated area out of sunlight. Keep containers tightly closed when not in use. Do not store with acidic compounds. Do not store with food items.

INCOMPATIBILITIES:

Do not mix with acids. The product is basic, with a pH of 12.3.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

AIRBORNE EXPOSURE LIMITS:

No value has been assigned for the material as produced. The individual constituent exposure levels are as follows:

Time Weighted Average (TWA)

- Substituted Phenol (Company recommendation): 1ppm (4 mg/ m³)

- Sodium Hydroxide: 2mg/m³

- 2-Butoxyethanol: 20ppm (96.9 mg/ m³)

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SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION cont.

Short Term Exposure Limit (STEL):
- Sodium Hydroxide: $2\text{mg}/\text{m}^3$
- 2-Butoxyethanol: 50ppm ($242\text{ mg}/\text{m}^3$ (skin))

VENTILATION SYSTEMS: Special ventilation is not normally required. However, if during operation mists or vapours are generated, localised exhaust ventilation should be used to maintain airborne concentration below the recommended exposure standard.

PERSONAL RESPIRATORS: During routine operation a respirator is not required. However, if mists or vapours are generated, an approved organic/particulate respirator is required. Use respirators in accordance with AS 1715 and AS 1716.

GLOVE TYPE: Wear gloves to provide hand protection. Natural rubber or neoprene are recommended.

CLOTHING: During normal operating procedures, long sleeved clothing is recommended to avoid skin contact. Soiled clothing should be washed with detergent prior to re-use.

EYE PROTECTION: Wear safety glasses/goggles to avoid eye contact when handling. If mixing the product and there is the possibility of splashing a full-face shield is recommended.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear liquid with a slight green tinge.
SPECIFIC GRAVITY at 15°C : $1.055\text{ g}/\text{m}^3$
pH at 20°C : 12.3
FLASHPOINT: Not applicable
SOLUBILITY: Soluble in water, alcohols, glycols
BOILING POINT: Not applicable
FLAMMABILITY LIMITS: Not applicable
REACTIVITY: This product is corrosive with a pH of 12.3.

SECTION 10 – STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under ordinary conditions of use and storage.

CONDITIONS TO AVOID: Avoid highly acidic materials.

INCOMPATIBLES: Strong acidic agents.

HAZARDOUS DECOMPOSITION

PRODUCTS: Combustion will provide oxides of carbon. Heating of solutions may release phenol vapours.

HAZARDOUS REACTIONS: None reported. Hazardous polymerisation will not occur.

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SECTION 11 – TOXICOLOGICAL INFORMATION

HEALTH EFFECTS

ACUTE

SWALLOWED: The material has a pH value of 12.3 and is expected to irritate the mouth, oesophagus and gastro-intestinal tract if swallowed. Irritation may be exacerbated in young and sensitive skin. If swallowed do not induce vomiting. Flush mouth with copious amounts of water and give a glass of water to drink. If poisoning occurs, contact a doctor or Poisons Information Centre (Phone in Australia 13 1126; New Zealand 0800 764 766). Take this MSDS with you.

EYE: Eye irritant. Due to the high pH of the material, not flushing the eyes immediately according to First Aid recommendations may lead to eye damage. Symptoms may include irritation, pain and redness. Avoid contact with the eyes.

SKIN: Irritating to the skin. Brief contact may cause mild irritation. Symptoms may include local redness and swelling. Avoid contact with the skin.

INHALED: Do not inhale this material. If used in a concentrated rather than diluted form that is aspirated and vapours or mists are generated, they are expected to cause irritation to the respiratory tract and mucous membranes.

CHRONIC

This material is alkaline and prolonged or repeated contact may cause irritation and skin reactions that may lead to dermatitis.

TOXICITY DATA:

The product as a whole has not been tested and there is no data available. Individual ingredient information is as follows:

p-tert-pentylphenol:

Oral (rat) LD50 - 1830 mg/kg.

Skin (rabbit): LD 50 - 2000mg.kg

Sodium o-phenylphenolate tetrahydrate:

Oral (rat) LD50 - 1720 mg/kg

Inhalation LC50 (rat) - Above 1331mg/L, 1 hour of exposure.

The concentration of 1331 mg/L caused no symptoms.

Skin Sensitisation: The product as a whole has not been tested and there is no data available in respect to the product being a skin sensitiser. However, skin irritation has been attributed to sodium o-phenylphenolate tetrahydrate. This has been attributed only to the concentrated form.

Respiratory Tract Sensitisation: This product is not expected to be a respiratory tract sensitiser, based upon the available data and the known hazards of the components.

Mutagenic: This product is not expected to be mutagenic, based upon the available data and the known hazards of the components.

Reproductive Toxicity: This product is not expected to be a reproductive hazard, based upon the available data and the known hazards of the components. Similarly the product is not expected to be a teratogen or embryotoxin.

Carcinogenicity: This product is not expected to be carcinogenic, based upon the available data and the known hazards of the components.

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SECTION 12 – ECOLOGICAL DATA

ECOTOXICITY:	No ecotoxicity information is available for the product. The aquatic toxicity of sodium o-phenylphenolate tetrahydrate LC50 (<i>Leusiscus idus</i>) is 0.5 to 5 mg/L. Duration of test 48hrs.
PERSISTENCE & DEGRADABILITY:	The product is soluble in water. There is no persistence or degradability information available.
MOBILITY:	No mobility information is available.
ENVIRONMENTAL FATE:	Sodium o-phenylphenolate tetrahydrate can be easily broken down biologically.
BIOACCUMULATIVE POTENTIAL:	No bioaccumulative potential information is available.

SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL METHODS/ CONTAINERS:	Spilled product, which cannot be recovered for use, should be shovelled into a suitable waste container, such as a plastic drum, and treated as a solid waste. Follow state or local regulations for disposal of the waste. Dispose of containers and unused contents in accordance with Federal, State and local requirements. Do not allow product to enter drains, sewers and watercourses.
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SECTION 14 – TRANSPORT INFORMATION

UN NUMBER:	Not applicable (The product is not regulated).
PROPER SHIPPING NAME:	Not applicable
ADG CODE:	Not applicable
PACKAGING GROUP:	Not applicable
SPECIAL PROVISION:	Not applicable
HAZCHEM CODE:	Not applicable

SECTION 15 – REGULATORY INFORMATION

HAZARDOUS: This product is classified as Hazardous according to criteria of the National Occupational Health and Safety Commission. It is not a dangerous good according to the Australian Dangerous Goods (ADG) Code. The product may be harmful if swallowed or when it comes into contact with the skin or eyes.

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S37/39 - Wear suitable gloves and eye/face protection.
S46 - If swallowed, contact a doctor or Poisons Information Centre (Phone in Australia 13 1126; New Zealand 0800 764 766) immediately and show this container or label.

No additional regulatory information is available.

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SECTION 16 – OTHER INFORMATION

Date of MSDS Preparation: 10th January 2006

Revision: 1

ACRONYMS

SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons
ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail
CAS Number	Chemical Abstracts Service Registry Number
UN Number	United Nations Number
ACGIH	American Conference of Governmental Industrial Hygienists
R-Phrase	Risk Phrases
S-Phrase	Safety Phrases
HAZCHEM No	An emergency action code of numbers and letters which gives information to emergency services
NOHSC	National Occupational Health and Safety Commission
AICS	Australian Inventory of Chemical Substances

CONTACT POINT

NAME:	Mr Bill Clark
TITLE:	Director
TELEPHONE NUMBER:	(03) 9484 1120 B/H 0403 244 455 After Hours

All information contained in this Material Safety Data Sheet and the health, safety and environmental information are considered to be accurate to the best of our knowledge as of the issue date specified above. However, no warranty or representation, expressed or implied, is made as to the accuracy or completeness of the data and information contained in this data sheet.

Health and safety precautions and environmental advice noted in this data sheet may not be accurate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The Company accepts no responsibility for any injury, loss or damage, resulting from abnormal use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material.