

SAFETY DATA SHEET

Section 1. Identification

Product Identifier:	Puli-Jet Gentle 2.0
Other means of identification:	Proper Shipping name: CORROSIVE LIQUID, N.O.S. Product code: 060980
Recommended use of the chemical and restrictions on use:	Commercial grade disinfectant with anti-scale agent for dental vacuum systems No special requirements, if product is handled as per safety instructions detailed in this SDS.
Details of manufacturer or importer:	Cattani Australia Pty Ltd 280 Dundas Street, Thornbury Victoria 3071
Telephone Number:	+61 3 9484 1120
Emergency Telephone number:	24 hours - 13 11 26 Australia (Poisons Hotline) - 0800 764 766 New Zealand (National Poison Centre)

Section 2: Hazards Identification

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; **DANGEROUS GOODS.**

Based on available information, classified as hazardous according to Safe Work Australia; **HAZARDOUS CHEMICAL.**

Acute toxicity, Oral (Category 4)
Skin corrosion/irritation, (Category 1B)
Serious eye damage/irritation (Category 2A)
Skin sensitization, (Category 1B)
Specific target organ toxicity – Single exposure, Respiratory system (Category 3)

Signal Word: Danger

Hazard Statements:

H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction
H335 May cause respiratory irritation
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

General

- P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of Children.
P103 Read label before use.

Prevention

- P261 Avoid breathing vapours/ fumes/ mist/ spray
P265 Wash hands thoroughly after handling.
P270 Do not eat drink or smoke when using this product
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves, protective clothing, eye protection and face protection.
P272 Contaminated clothing should not be allowed out of the workplace
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or a doctor
P333+P313 If skin irritation or rash occurs: Get medical advice or attention.

Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/ physician if you feel unwell.

IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin or rash occurs: Get medical advice/ attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POSION CENTER or doctor/physician.

Storage

Store in a well-ventilated place. Keep container tightly closed.

Other hazards

None

Hazard Symbols



Section 3. Composition and information on ingredients

Chemical Identity	Synonym	CAS Number	Proportions (%w/w)
Chlorocresol	4-Chloro-m-cresol	59-50-7	5.0 – 10.6%
1-methoxy-2-propanol	Propylene glycol monomethyl ether	107-98-2	5 - 8.0%
Sodium hydroxide	-	1310-73-2	1.0 - 2.0%
Tetrasodium ethylene diamine tetraacetate	-	64-02-8	1.0 - 3.17%
Propan-2-ol	-	67-63-0	1.0 - 2.6%
Biphenyl-2-ol	-	90-43-7	1.0 – 2.35%
3-butoxypropan-2-ol	-	5131-66-8	1.0 – 2.0%
Citral	Geranial;3,7-Dimethyl-2,6-octadienal; Neral	5392-40-5	0.1 – 0.133%
Phosphoric acid	-	7664-38-2	0.01 – 0.1%
Nonhazardous	-	-	To 100%

Section 4. First aid measures

In case of poisoning contact a doctor or Poisons Information Centre on 131 126, New Zealand 0800 764 766

Have the product label or SDS with you when calling or going for treatment.

Ingestion: Rinse mouth with water and drink afterwards with plenty of water. Do NOT induce vomiting. Get medical attention if symptoms occur.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

Skin Contact: Wash off immediately with plenty of water for at least 15 minutes. If irritation persists, call a physician. Wash contaminated clothing before re-use.

Inhalation: Move person to fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical attention if symptoms occur.

Symptoms caused by exposure: Symptoms include serious eye irritation. May cause allergic skin reaction.

1-methoxy-2-propanol Acute dose-related effects: Skin: irritation Nervous system: depression Eyes: irritation Upper respiratory tract: irritation Chronic effects: no data on chronic effects are currently available.

Sodium hydroxide Acute dose-related effects: Skin: irritation, necrosis Eyes: irritation, corneal damage Lungs: irritation, bronchospasm Digestive tract: if ingested, abdominal colic, nausea, vomit, hematemesis, melena. Chronic effects: Skin: irritation Lungs: irritation

Phosphoric acid Acute dose-related effects: Skin: irritation, burn, corrosion Eyes: irritation, keratitis, corneal damage Oral cavity: Nose: irritation Upper respiratory tract: irritation Lungs: irritation Chronic effects: no data on chronic effects are currently available

Medical attention and special treatment: Treat symptomatically.

Section 5. Firefighting measures

Suitable extinguishing equipment:

Water spray, carbon dioxide (CO₂), dry chemical, dry sand, alcohol-resistant foam.
Do not use jets of water.

Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

Specific Hazards arising from the chemical:

Overpressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products (CO_x, NO_x, chlorates, PO_x).

Special protective equipment and precautions for firefighters:

GENERAL INFORMATION Use water spray to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

Hazchem Code: 2X

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment as required. Ensure adequate ventilation. For non-emergency personnel Alert the staff responsible for handling these emergencies. Move away from the accident area if you do not have the personal protective equipment listed in Section 8.

For emergency responders Remove all staff not adequately equipped to deal with the emergency. Wear appropriate personal protective equipment referred to in section 8 of the safety data sheet to prevent contamination of the skin, eyes and personal clothing. Stop the leak if there is no danger. Make the area affected by the accident accessible to workers only after adequate remediation has taken place. Ventilate the premises affected by the accident.

Environmental precautions:

No special precautions required, other than to clean up any spillages to prevent spillages entering natural waterways.

Methods and materials for containment and cleaning up:

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

Spill area may be slippery and should be mopped up with detergent and water.

Treat the recovered material as prescribed in the section on waste disposal.

Section 7. Handling and storage

Precautions for safe handling:

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid formation of vapours.

Conditions for safe storage, including any incompatibilities:

Store only in the original container. Store in a well-ventilated place, keep far away from sources of heat, naked flames and other sources of ignition. Keep containers away from any incompatible materials, such as strong oxidizing agents. Strong bases. Strong reducing agents.

Section 8. Exposure controls and personal protection

Component	TWA 8h	TWA 5 days	STEL	Peak limitations (If available)
Propylene glycol monomethyl ether	-	-	100 ppm	-
Sodium hydroxide	2 mg /m ³	-	-	-

No exposure standard assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituents has been shown in table.

Note: As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a substance when calculated over an eight-hour working day, for a five-day working week.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as clear defining points between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Biological monitoring:

No biological limits allocated

Control banding:

Use good industrial hygiene practice and general ventilation.

Engineering controls:

Provide adequate ventilation

Local exhaust ventilation is generally preferred when used in confined areas.

Ensure that eyewash stations and safety showers are close to the workstation location.

Individual protection measures, for example personal protective equipment (PPE):

Eye and face protection

Eyeglasses with side protection DIN EN 166. Use tightly fitting safety glasses as per Australian Standard AS/NZS 1336 and AS/NZS 1337. Safety glasses with side shields

Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

Wear a P2 particulate respirator when handling this product (AS/NZS 1715 and AS/NZS 1716).

Thermal hazards

Not applicable. Data is not available

Other information.

Reference standards for (PPE).

Respiratory protection: AS/NZS 1715 and AS/NZS 1716.

Gloves: AS/NZS 2161.1.

Eye protection: AS/NZS 1336 and AS/NZS 1337

Section 9. Physical and chemical properties

Appearance	Liquid
Auto-ignition temperature:	Product is not self-igniting.
Decomposition temperature:	Data is not available
Evaporation rate:	Data is not available
Flammability (solid, gas):	Data is not available
Flash point:	Data is not available
Initial boiling point and boiling range:	Data is not available
Melting point/freezing point	Data is not available
Odour:	Data is not available
Odour threshold:	Data is not available
Partition coefficient: n-octanol/water:	Data is not available
pH:	10.9 (20 °C / 100g/l)
Relative density:	Data is not available
Solubility:	Soluble in water
Upper/lower flammability or explosive limits:	Data is not available
Vapour density:	Not applicable
Vapour pressure:	Not applicable
Viscosity:	Data is not available

Other physical/chemical parameters

Biodurability or biopersistence:	Data is not available
Crystallinity:	Data is not available
Degree of aggregation or agglomeration and dispersibility:	Data is not available
Dustiness:	Data is not available
Particle size (average and range):	Data is not available
Redox potential:	Data is not available
Release of invisible flammable vapours and gases:	Data is not available
Saturated vapour concentration:	Data is not available
Shape and aspect ratio:	Data is not available
Size distribution:	Data is not available
Specific heat value:	Data is not available
Surface area:	Data is not available
Surface coating or chemistry:	Data is not available

Section 10. Stability and reactivity

Reactivity:	Not reactive if used under normal conditions of use
Chemical stability:	Stable under normal conditions of use.
Possibility of hazardous reactions:	The product is stable in normal conditions of use and storage.
Conditions to avoid:	Excess heat. Avoid vapour formation and water from penetrating inside the containers.
Incompatible materials:	Strong oxidizing agents, Strong bases, Strong reducing agents
Hazardous decomposition products:	Combustion or thermal decomposition will evolve toxic and irritant vapours, such as Nitrogen oxides (NO _x), Carbon monoxide (CO), Carbon dioxide (CO ₂), Hydrogen halides

Section 11. Toxicological information

Information on possible routes of exposure:

Product information on active components in mixture

Chemical	LD ₅₀ (Oral)	LC ₅₀ (Inhalation)	LD ₅₀ (Dermal)
4-Chloro-m-cresol	1830 mg/kg (Rat)	> 2871 mg/l (4h) (Rat)	>2000 mg/kg (Rat)
Propylene glycol monomethyl ether	5000 mg/kg (Rat)	> 7559 mg/l (6h) (Rat)	13 mg/kg (Rabbit)
Biphenyl-2-ol	2733 mg/kg (Rat)	> 36 mg/l/4h Rat	>2000 mg/kg (Rat)
Tetrasodium EDTA	1789 -2000 mg/kg (Rat)	Not listed	Not listed
Sodium hydroxide	Oral) 325 mg/kg bw Rabbit	Not listed	Not listed

Acute Health Effects

Inhalation:

Causes respiratory tract irritation.

Skin:

Causes irritation and pain if prolonged skin exposure.

Eye:

Causes pain, lachrymation and burns. Mild burns generally recover rapidly and completely. Severe burns produce long-lasting and possible irreversible damage.

Ingestion:

Causes irritation of the mouth, throat and oesophagus.

Skin Corrosion / Irritation:

Causes skin irritation.

Serious Eye Damage / Irritation:

Causes serious eye damage.

Respiratory or Skin Sensitisation:

Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity:

Based on classification principles, the classification criteria are not met.

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) – Single Exposure:

May cause respiratory irritation.

Specific Target Organ Toxicity (STOT) – Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard:

Based on classification principles, the classification criteria are not met.

Chronic Health Effects:

Repeated or prolonged exposure may cause bronchial irritation, with cough, and frequent attacks of bronchial pneumonia and gastrointestinal disturbances. Chronic exposures may result in dermatitis and/or conjunctivitis.

Existing Conditions Aggravated by Exposure:

Pre-existing allergies, eye, skin and respiratory disorders.

Early onset of symptoms related to exposure:

First symptoms on exposure being skin and eye irritation.

Delayed health effects from exposure:

Delayed or immediate effects from exposure can be expected within 24 hrs of exposure and include acute and chronic health effects and detail if data is on humans or animals.

Exposure levels and health effects:

The toxicological properties have not been fully investigated.

Interactive effects:

Health effects from exposure can be worsened by drinking alcohol, taking medication or smoking. Pre-existing medical conditions such as asthma, high blood pressure or a predisposition to allergic reactions may increase risk.

Data is not available for this product mixture

Other information:

Data is not available for this product mixture

Section 12. Ecological Information

Ecotoxicity:

Component	Toxicity to fish:	Toxicity to Daphnia magna and other aquatic invertebrates:	Toxicity to algae and other aquatic plants:
4-Chloro-m-cresol	LC50: = 917 µg/L, 96h static (Oncorhynchus mykiss) LC50: 1000 – 10000 µg/L, 96h static (Pimephales promelas) LC50: 3.11 – 5.27 mg/L, 96h flow-through (Pimephales promelas)	Not listed	EC50: 30-62 mg/L, 72h (Desmodesmus subspicatus)
1-methoxy-2-propanol	41 mg/l/96h Lepomis macrochirus	140 mg/l/48h Daphnia magna (water flea)	static test EC50 – activated sludge - > 500 mg/l – 0.5 h (OECD Test Guideline 209)
Propylene glycol monomethyl ether	LC50: = 20.8 g/L, 96h static (Pimephales promelas)	Not listed	Not listed
Tetrasodium EDTA	LC50: = 121 – 1592 mg/L, 96h static (Lepomis macrochirus)	Not listed	EC50: = 1.01 mg/L, 72h (Desmodesmus subspicatus)
Sodium hydroxide	180 mg/l/96h Gambusia affinis	40,4 mg/l/48h Ceriodaphnia sp.	

Persistence and degradability: Data is not available

Bioaccumulative potential: Data is not available

Mobility in soil: Data is not available

Other adverse effects: No information available (environmental fate, ozone depletion, photochemical ozone creation potential, endocrine-disruption potential and global warming potential.)

Section 13. Disposal consideration

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or incineration:

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible, material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional national and international Regulations.

Section 14. Transport Information

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail. (ADG Code).

MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No: (ADG, IMDG, IATA)	1760
Proper Shipping Name: (ADG, IMDG, IATA)	CORROSIVE LIQUID, N.O.S.
Dangerous Goods Class: (ADG Class)	8
Subsidiary Risk(s): (ADG)	N/A
Packing Group number: (ADG, IMDG, IATA)	II
Marine pollutant: (IMDG)	No
Hazchem Code: (ADG)	2X
Emergency Response Guide No:	154
Special precautions for user:	Data not available
Additional information:	No additional information

Section 15. Regulatory information

This material is not subject to the following international agreements:

- Montreal Protocol (Ozone depleting substances)
- The Stockholm Convention (Persistent Organic Pollutants)
- The Rotterdam Convention (Prior Informed Consent)
- Basel Convention (Hazardous Waste)
- International Convention for the Prevention of Pollution from Ships (MARPOL).

This material/constituent(s) is covered by the following requirements:

- the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act 1989 (Cwth) (as amended). **If so, list the relevant Poisons Schedule number** . (Not Listed)
- All components of this product are listed on or exempt from the Australian Inventory of Chemical Substances (AICS).

Source of data

This SDS has been prepared in accordance with the Safe Work Australia Preparation of safety data sheets for hazardous chemicals Code of Practice, prepared under the Work Health and Safety Act and Work Health and Safety Regulations.

Code of Practice: Labelling of workplace hazardous chemicals
'Standard for the Uniform Scheduling of Medicines and Poisons No. 34'
Hazard Classification

Australian Inventory of Chemical Substances (AICS) (NICNAS)

Chemical Assessment Reports (NICNAS)

Workplace Exposure Standards for Airborne Contaminants

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
(United Nations) Global Portal to Information on Chemical Substances (OECD).

OECD means the Organisation for Economic Cooperation and Development.

Hazardous Chemical Information System

European Chemicals Agency (ECHA)

Other references

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IARC: International Agency for Research on Cancer.

Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley and Sons, Inc., NY, 1997.

Australian Emergency Response Guidebook

Section 16. Other Information

Date of preparation: 25 July 2022

Reason for issue: Review & format change

Prepared by: ChemVit Consulting Pty Ltd. www.chemvit.com.au

Key abbreviations or acronyms used

<p>< Less Than. > Greater Than. AICS Australian Inventory of Chemical Substances. atm Atmosphere. CAS Chemical Abstracts Service (Registry Number). cm² Square Centimetres. deg C (°C) Degrees Celsius. CNS Central Nervous System EC No European Community number. g Grams g/cm³ Grams per Cubic Centimetre. g/l Grams per Litre. IDLH Immediately Dangerous to Life and Health. LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period, usually 1 or 4 hours. LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.</p>	<p>mg/m³ Milligrams per Cubic Metre NIOSH National Institute for Occupational Safety and Health. NOHSC National Occupational Health and Safety Commission. OECD Organisation for Economic Co-operation and Development. ppb Parts per Billion. ppm Parts per Million. psi Pounds per Square Inch. REACH Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals. SWA Safe Work Australia. STEL Short Term Exposure Limit. TLV Threshold Limit Value. TWA Time Weighted Average. UN United Nations.</p>
---	--

Disclaimer

This Safety Data Sheet was prepared in good faith from the best information available at that time of issue and is based on the present state of our knowledge and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. Cattani Australia Pty Ltd and its Affiliates or Agents shall not be held liable or responsible for any damage or unauthorised use of this information or from contact with this product.

In all cases please ensure you have the current version. The user is cautioned to make their own determinations as to the suitability of the information provided to the circumstances in which the product is used.

END OF SDS