MATERIAL SAFETY DATA SHEET

Cleantec
A Campbell Brothers Limited Business

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT NAME: **SUPER SOLV**

OTHER NAMES: **PACER SUPER SOLV**

RECOMMENDED USE: **Solvent cleaner.**

SUPPLIER

NAME: **CAMPBELL CLEANTEC (ABN 92 009 657 489)**

ADDRESS: **32 PERIVALE STREET, DARRA, QLD, 4076**

TELEPHONE:
GENERAL ENQUIRIES: **+ 61 7 3710 3200**
CUSTOMER SERVICE: **1800 077 240**

FAX:
GENERAL ENQUIRIES: **+ 61 7 3710 3210**
CUSTOMER SERVICE: **+ 61 7 3710 3207**

EMERGENCY TELEPHONE NUMBER:
AUSTRALIA: **1800 628 724 (ALL HOURS)**
INTERNATIONAL: **+ 61 7 3710 3184 (ALL HOURS)**

2. HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION:
Classified as **hazardous** according to the criteria of NOHSC.
Classified as a **dangerous good UN 1993** according to the criteria of ADG Code (see section 14).
Classified as **schedule 6** according to the criteria of SUSDP (see section 15).

HAZARD CATEGORY: F – Flammable; Xn – Harmful; Xi – Irritant; N – Dangerous for the environment

RISK PHRASES:
R10 – Flammable
R20/21/22 – Harmful by inhalation, in contact with skin and if swallowed
R36/37/38 – Irritating to eyes, respiratory system and skin.
R43 – May cause sensitisation by skin contact.
R51 – Toxic to aquatic organisms.
R65 – Harmful: may cause lung damage if swallowed.

SAFETY PHRASES:
S2 – Keep out of reach of children.
S9 – Keep container in well-ventilated place.
S16 – Keep away from sources of ignition – No smoking.
S23 – Do not breathe vapours.
S24/25 – Avoid contact with eyes and skin.
S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S29 – Do not empty into drains.
S33 – Take precautionary measures against static discharges.
S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection.
S61 – Avoid release to the environment. Refer to special instructions / Material Safety Data Sheet.
S62 – If swallowed, do not induce vomiting: seek medical advice immediately and show container or label.

The information contained in this MSDS is specific to the product when handled and used neat. This product when diluted may not require the same control measures as the neat product. Check with your technical representative if in doubt.

3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	CAS No.	PROPORTION (% w/w)
*The ingredients below are considered either **hazardous, dangerous goods or poison scheduled** according to the criteria of NOHSC, ADG Code and SUSDP (respectively) at the levels used in the product.*		
Ethylene glycol monobutyl ether	111-76-2	30 – 60%
Distillates (petroleum) hydrotreated light	64742-47-8	30 – 60%
d-Limonene	5989-27-5	10 – <30%
*The ingredients below are **not** considered either **hazardous, dangerous goods or poison scheduled** according to the criteria of NOHSC, ADG Code and SUSDP (respectively) at the levels used in the product.*		
Non-ionic surfactant		<10%

4. FIRST AID MEASURES

INGESTION: For advice, contact a Poisons Information Centre (Phone Australia 131126, New Zealand 0800 764 766) or a doctor. If swallowed, do NOT induce vomiting.

EYE CONTACT: 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 or a doctor, or for at least 15 minutes.

SKIN CONTACT: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor.

INHALATION: Remove from source of exposure to fresh air. Seek medical assistance if the effects persist.

***** SHOW THIS SAFETY DATA SHEET TO A DOCTOR *****

FIRST AID FACILITIES: Potable water should be available to rinse eyes or skin. Provide eye baths and safety showers.

NOTES TO PHYSICIAN: Treat symptomatically.

5. FIRE FIGHTING METHODS

SUITABLE EXTINGUISHING MEDIA: Foam, carbon dioxide or dry chemical powder.

HAZARDS FROM COMBUSTION: Flammable liquid. Explosive air-vapour mixture may form. Explosive when mixed with oxidising agents. Vapour is heavier than air, can spread along the ground and distant ignition is possible. Avoid all ignition sources. Keep away from heat, naked flames or sparks and oxidising agents. Flameproof equipment is necessary in all areas where this chemical is being used. Nearby equipment must be earthed. Heating can cause expansion or decomposition of the material, which can lead to the containers exploding. If safe to do so, remove containers from the path of fire. On burning will emit toxic fumes such as carbon monoxide and carbon dioxide.

PRECAUTIONS FOR FIRE FIGHTERS AND SPECIAL PROTECTIVE EQUIPMENT: Fire fighters should wear self-contained breathing apparatus to minimise risk of exposure to vapour or products of combustion.

HAZCHEM CODE: 3[Y]

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES: Shut off leak if safe to do so. Eliminate all sources of ignition (no smoking, flares, sparks or flame). All equipment used must be earthed. Spillages are slippery. Ensure adequate ventilation, work up wind or increase ventilation. Keep spectators away – rope off the area or evacuate the area. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and inhalation of mists or vapour.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP: Do not smoke during the clean up procedure. Contain the spill and prevent run off into confined areas, drains and waterways.

Absorb with dry earth, sand or other non-combustible material. Use clean, non-sparking tools to collect and seal in properly labelled drums for disposal in an area approved by local authority by-laws. Keep away from heat, naked flame or sparks.

Wash area down with excess water to remove residual material. Do not flush to drain.

DO NOT incinerate: the by-products may be hazardous.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:

Keep containers closed at all times - check regularly for leaks or spills. Earth and bond all transfer equipment including tanks and drums. Transport and store upright.

Avoid eye contact and repeated or prolonged skin contact and breathing in mists. Do not eat, drink or smoke in contaminated areas. Always remove contaminated clothing and wash hands before eating, drinking, smoking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

CONDITIONS FOR SAFE STORAGE:

Store in the original container, in a cool, dry, well-ventilated area out of sunlight and away from heat and foodstuffs. Explosive air-vapour mixture may form. Keep material away from sparks, flames and other ignition sources. Keep away from oxidising agents, may form explosive mixtures.

Keep containers closed when not in use to ensure contamination does not occur- check regularly for leaks. Do not combine part drums of the same product, as this may be a source of contamination. Do not mix with other chemicals.

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

NATIONAL EXPOSURE STANDARDS:

No value assigned for this specific material by NOHSC, however the exposure standard for ETHYLENE GLYCOL MONOBUTYL ETHER as published by NOHSC:

ES-TWA for Ethylene glycol monobutyl ether = 20 ppm (96.9 mg/m^3)
ES-STEL for Ethylene glycol monobutyl ether = 50 ppm (242 mg/m^3)

Overseas occupational exposure standards for D-LIMONENE are listed below::
Norway (OEL) T.W.A. for d-Limonene = 140 mg/m^3 (25 ppm)
Sweden T.W.A. for d-Limonene = 150 mg/m^3 (25 ppm)
Sweden S.T.E.L. for d-Limonene = 300 mg/m^3 (50 ppm)
AIHA T.W.A. for d-Limonene = 165.6 mg/m^3 (30 ppm)

BIOLOGICAL LIMIT VALUES:

No biological limit allocated.

ENGINEERING CONTROLS:

Ensure ventilation is adequate to maintain air concentrations below Exposure Standards.
If inhalation risk exists then use with local exhaust ventilation or while wearing a suitable respirator. Vapour heavier than air - prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use.

PERSONAL PROTECTIVE EQUIPMENT:

Protective equipment must be worn at all times. Risk assessments should always be conducted to identify the hazards and in turn determine the appropriate personal protective equipment for the hazard.

Protective gloves: elbow-length laminate film or unsupported nitrile impervious gloves. Always check with the glove manufacturer or your personal protective equipment supplier regarding the correct type of glove to use. Consult AS/NZS 2161 for further information.

Eye protection: safety glasses/goggles with side shield protection and/or full-face shield. Consult AS/NZS 1336 and AS/NZS 1337 for further information.

Clothing and footwear: waterproof apron, coveralls, trousers, long sleeved shirt, closed in shoes and/or safety footwear. Consult AS/NZS 2210 and AS/NZS 2919 for further information.

Respiratory Protection: Avoid breathing mist, sprays or vapours. Where ventilation is not adequate, respiratory protection may be required. Any air-purifying respirator with an organic gases and vapour filter or any chemical cartridge respirator with an organic vapour cartridge(s) providing protection against the compounds of concern meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE:	Clear, colourless liquid.
ODOUR:	Icinol odour.
pH (NEAT):	Not relevant.
SPECIFIC GRAVITY OR DENSITY:	0.83
VAPOUR PRESSURE:	No information available.
PERCENT VOLATILES:	Approx. 99% w/w
BOILING POINT / RANGE:	No information available.
FREEZING / MELTING POINT:	No information available.
SOLUBILITY:	No information available.
FLASH POINT:	56 °C
FLAMMABILITY LIMITS:	No information available.
IGNITION TEMPERATURE:	No information available.
SHELF LIFE:	2 years from manufacturing date (when stored as directed).
OTHER:	None.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable under normal conditions of use. The shelf life is 2 years.
CONDITIONS TO AVOID:	Do not combine part drums of the same product, as this may be a source of contamination. Keep material away from excessive heat, sparks, flames and other ignition sources. Keep away from oxidising agents.
INCOMPATIBLE MATERIALS:	Oxidising agents, mineral acids, strong alkalis, halogenated compounds and peroxides. Natural rubber, butyl rubber, neoprene, EPDM, polystyrene and painted surfaces. Aluminium, copper, and their alloys.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon oxides, soot, smoke and other organic compounds. The packaging material may burn to emit noxious fumes.
HAZARDOUS REACTIONS:	Explosive air-vapour mixture may form. Explosive when mixed with oxidising substances. Contact with aluminium or its alloys may result in alcoholate formation and subsequent evolution of hydrogen.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

ACUTE EFFECTS

INGESTION: Swallowing can result in irritation to the gastro-intestinal tract, nausea, vomiting, diarrhoea, abdominal pain, headache, dizziness, central nervous system depression and loss of consciousness. Aspiration into lungs when swallowed or vomited may cause chemical pneumonitis.

EYE CONTACT: A severe eye irritant and may cause redness and swelling. Vapour can also irritate the eye.

SKIN CONTACT: Harmful in contact with skin. Moderate skin irritant and may defat the skin with continual use causing severe irritation. Symptoms may include redness, and swelling of skin. Can be absorbed through the skin. May cause sensitisation by skin contact.

INHALATION: Vapours, mists and sprays are capable of causing irritation to the mucous membranes and respiratory tract, headache and nausea. High concentrations may result in dizziness and vomiting, central nervous system depression, which can lead to loss of coordination, impaired judgment and, if exposure is prolonged, unconsciousness.

LONG TERM EFFECTS: No information available for the product.

ACUTE TOXICITY / CHRONIC TOXICITY: No toxicity data for this specific product, however toxicity data for the hazardous ingredients is listed below.

TOXICITY DATA FOR D-LIMONENE

Dermal LD_{50} (rabbit) > 5000 mg/kg
Oral LD_{50} (rat, male) 4.4 g/kg
Oral LD_{50} (rat, female) 5.1 g/kg
Oral LD_{50} (mouse, male) 5.6 mg/kg
Oral LD_{50} (mouse, female) 6.6 mg/kg

TOXICITY DATA FOR ETHYLENE GLYCOL MONOBUTYL ETHER:

Oral LD_{50} (rat) 530 - 3000 mg/kg
Oral LD_{50} (guinea pig) 950 - 1414 mg/kg
Dermal LD_{50} (rabbit) 100 – 610 mg/kg
Dermal LD_{50} (guinea pig) 1200 - >2000 mg/kg
Inhalation LC_{50} (rat) 450-490 ppm/4H

12. ECOLOGICAL INFORMATION

ECOTOXICITY: Avoid contaminating waterways. Expected to be toxic to fish and invertebrates.

ECOTOXICITY DATA FOR D-LIMONENE:
LC_{50} Rainbow Trout 80 – 88.7 mg/L/96 hr
LC_{50} Fathead minnow 0.702 mg/L/96 hr
EC_{50} Daphnia Magna 0.421mg/L/48 hr

ECOTOXICITY DATA FOR ETHYLENE GLYCOL MONOBUTYL ETHER:
24hr LC_{50} (goldfish): 1650 mg/L
7 day LC_{50} (guppy): 983 ppm

PERSISTENCE AND DEGRADABILITY: The product is considered to be readily biodegradable.

MOBILITY: No information available.

OTHER: None.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS: Dispose of material under the requirements of state environmental authority. Advise of flammable nature. Do not contaminate stream, rivers or watercourses. Inform local authority if liquid enters drains, sewers, streams, etc. Empty containers should be forwarded to an approved agent for recycling.

SPECIAL PRECAUTIONS FOR LANDFILL OR INCINERATION: Dispose of material through a licensed waste contractor. Incinerate under controlled conditions if permitted by local authorities.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT: Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail.

UN NUMBER: 1993

UN PROPER SHIPPING NAME: FLAMMABLE LIQUID, N.O.S. (CONTAINS d-LIMONENE)

CLASS AND SUBSIDIARY RISK(S): 3

PACKAGING GROUP: III

HAZCHEM CODE: 3[Y]

INITIAL EMERGENCY RESPONSE GUIDE: Guide 14

SEGREGATION DANGEROUS GOODS: Not to be loaded with explosives (class 1), toxic gas (class 2.3), spontaneously combustible (class 4.2), oxidising agents (class 5.1), organic peroxides (class 5.2), radioactive substances (class 7), foodstuffs and foodstuff empties, however exemptions may apply.

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

UN NUMBER: 1993

UN PROPER SHIPPING NAME: FLAMMABLE LIQUID, N.O.S. (CONTAINS d-LIMONENE)

CLASS AND SUBSIDIARY RISK(S): 3

PACKAGING GROUP: III

STOWAGE AND SEGREGATION: Category A

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

UN NUMBER: 1993

UN PROPER SHIPPING NAME: FLAMMABLE LIQUID, N.O.S. (CONTAINS d-LIMONENE)

CLASS AND SUBSIDIARY RISK(S): 3

PACKAGING GROUP: III

ERG CODE: 3L

15. REGULATORY INFORMATION

POISONS SCHEDULE (AUST.): 6

APVMA STATUS: Not relevant.

TGA STATUS: Not relevant.

AICS STATUS: All the constituents of this product are listed.

AQIS STATUS: Not relevant.

OTHER: Not relevant.

16. OTHER INFORMATION

GENERAL INFORMATION: This product is a flammable liquid. Use good industrial hygiene.

MSDS ISSUE NUMBER: 002

MSDS ISSUE DATE: 29 AUGUST 2006

In any event, the review and, if necessary, the re-issue of a MSDS shall be no longer than 5 years after the last date of issue.

Electronic versions of the MSDS's in a PDF format are also available on our Website at www.cleantec.com.au/product.asp

REASON(S) FOR ISSUE: Update to conform to requirements of NOHSC:2011(2003); 16-header format.

THIS ISSUE NUMBER REPLACES ALL PREVIOUS ISSUES.

LITERARY REFERENCE:

SOURCES FOR DATA:

LEGEND:	
AICS	Australian Inventory of Chemical Substances
AIHA	American Industrial Hygiene Association
APVMA	Australian Pesticides and Veterinary Medicines Authority
AQIS	Australian Quarantine and Inspection Service
AS	Australian Standard (as issued by Standards Australia)
ERP Code	Emergency Response Drill Code as found in the ICAO (International Civil Aviation Organisation) Doc 9481
MSDS	Material Safety Data Sheet
NOHSC	National Occupational Health and Safety Commission
OEL	Occupational Exposure Limit
STEL	Short Term Exposure Limit - A 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.
TGA	Therapeutic Goods Administration
TLV	Threshold Limit Value - TLV is a proprietary name registered by the American Conference of Governmental Industrial Hygienists (ACGIH) and refers to airborne concentrations of substances or levels of physical agents to which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effect.
TWA	Time Weighted Average - The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

End of MSDS