

Material Safety Data Sheet

1. IDENTIFICATION OF MATERIAL AND SUPPLIER

PRODUCT NAME: PAD KLEEN

Synonyms: None

Recommended Use: Industrial Solvent and metal degreasing agent.

Supplier: Minehan Agencies Pty Ltd

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Emergency telephone number: 0408 777 800 (24hrs Australia)

2. HAZARDS IDENTIFICATION

This product is classified as:

Hazardous Substance according to criteria of the National Occupational Health and Safety Commission (NOHSC).

Dangerous Goods according to the Australian Dangerous Goods Code (ADG Code).

Approved Criteria Classification (Calculated).	Harmful (Xn) R20, R21, R22, R36/37/38, S48, R51/53, R66, R67 Safety Phrases S2, S14, S23, S24/25, S26, S28, S33, S35, S36/37/39, S61
SUSDP Classification	Not Scheduled
ADG Classification	Class 2.2 (Non-Flammable Aerosol.)
Un Number	1950

EMERGENCY OVERVIEW

COLOUR	Clear
PHYSICAL DESCRIPTION	Aerosol
ODOUR	Characteristic
MAJOR HEALTH HAZARD	Harmful by ingestion. Irritant to eyes, skin, and respiratory system

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POTENTIAL HEALTH EFFECTS

Inhalation: Remove victim from area of exposure – avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest till fully recovered. If patient finds breathing difficult and develops a bluish dis-colouration of the skin (which suggests a lack of oxygen in the blood – cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a facemask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Skin Contact: Short term exposure. If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye Contact: Short term exposure. 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.

Ingestion: Short term exposure. Headaches, nausea, and severe abdominal pain may result. Vomiting may cause product to be aspirated into the lungs possibly resulting in chemical pneumonitis. **Long-term exposure.** Not known

Carcinogen Status

NOHSC	Not Classified
NTP	Not Classified
IARC	Not Classified

3. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL ENTITY	CAS No	PROPORTION W/W %
Trichloroethylene	79-01-6	>60%
Isopropyl Alcohol	67-63-0	1-10%
Carbon Dioxide	124-38-9	1-10%
Other ingredients determined not to be hazardous		to 100%

4. FIRST AID MEASURES

Poison Information Centres in each State capital city can provide additional assistance for Scheduled Poisons: Phone (Australia 13 1126).

Inhalation: Remove victim from exposure. Remove contaminated clothing and loosen remaining clothing. Perform artificial respiration if needed. Allow patient to assume most comfortable position and keep warm. Seek medical attention.

Skin Contact: Remove contaminated clothing. Wash contaminated skin for at least 15-20mins with of water, or until no evidence of the chemical remains. If swelling, redness, blistering, or irritation occurs seek medical advice. Wash clothing before re-use.

Eye Contact: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. If present, remove contact lenses. Seek medical attention.

Ingestion: Immediately rinse mouth with water. Do NOT induce vomiting. Seek urgent medical attention.

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Notes to Physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flash Point: Flammable.

Fire and Explosion Hazard: Aerosol. Cans exposed to heat may violently explode.

Specific Hazards: Containers may explode in a large fire.

Fire Fighting: Move cans from fire area if it can be done without risk. Cover exposed liquid with foam. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. **Suitable Extinguishing Media:** Use foam, CO₂ or dry chemical powder to extinguish surrounding fire.

Hazardous Decomposition in Products: On burning may emit fumes including carbon monoxide, carbon dioxide, and partially burned hydrocarbons. Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of combustion.

Hazchem Code: 3[Y]E

6. ACCIDENTAL RELEASE MEASURES

Stop leak if possible without personal risk. Wear protective equipment to prevent personal injury (see section 8). **Small spills (< 5L)** Cover with an absorbent material (soil, sand or other inert material). Collect and seal in properly labelled containers for disposal. Hose down area with large amounts of dilute detergent. Caution, Slip Hazard. **Large spills (>5L)** Prevent run off into drains and waterways. Dam material. Apply absorbent material. Collect and seal in properly labelled containers for disposal. Hose down area with large amounts of dilute detergent. Keep unnecessary people away, isolate hazard area and deny entry. If contamination of sewers or waterways has occurred, advise local emergency services.

7. HANDLING AND STORAGE

Store below 48°C in a well-ventilated dry area away from heat and ignition sources and out of direct sunlight. Store away from foodstuffs, strong oxidizing agents, and strong acids. Keep containers closed when not in use – check regularly for leaks. This material is a Class 2.2 Aerosol and must be stored, maintained and used in accordance with the relevant regulations. Handle using good industrial hygiene practices (see section 8 on personal protection).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: No value has been assigned for this specific material by NOHSC. However exposure limits for ingredients are shown below

Ingredient	TWA	STEL	Notices
Trichloroethylene	270ppm	1080ppm	Cat 3 Carcinogenic Potential
Isopropyl Alcohol	983ppm	1230ppm	
Carbon Dioxide	9000ppm	54,000ppm	

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TWA – the Time-Weighted Average airborne concentrations over an eight hour working day, for a five day week over an entire working life.

STEL (Short Term Exposure Limit) – the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight hour work day. According to current knowledge, these concentrations should neither impair the health of, nor cause undue discomfort to, nearly all workers.

Sk Notice – absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

Sen Notice- Sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to minute levels of that substance.

These 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. Exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Biological Limit Value: No biological limit allocated.

Engineering Controls: Use only in well ventilated areas. Exhaust ventilation may be required to prevent build-up of flammable vapours and to maintain air concentrations below Exposure Standards. Flameproof equipment is necessary in any area where product is being used. Product transfer and storage equipment must be earthed. Keep containers closed when not in use.

Personal Protection Equipment

Respirator Type (AS 1716): If inhalation risk exists, wear organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Eye Protection: Safety glasses with side shields or goggles should be worn as described in Australian Standard AS/NZS 1337 – Eye Protectors for Industrial Applications.

Glove Type: Impervious PVC or rubber gloves should be worn.

Clothing: Suitable protective clothing should be worn eg: cotton overalls buttoned at neck and wrist.

Work/Hygienic Practices: Always wash hands before smoking, eating, drinking or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Aerosol		Water Solubility	Immiscible
Colour	Clear		Vapour Pressure	1.0 mm Hg
Odour	Characteristic		Vapour Density	>1 (air =1)
Boiling Point	°C		Evaporation Rate	<1 (butyl acetate=1)
Melting Point	-78°C		% Volatiles	>60%
Freezing Point	Not known		Flash Point	11.67 Setaflash
Specific Gravity	g/ml (water =1)		Flammability Limits	2.3 to 12.7% vol/air
Ph (neat)	NA		Ignition Temperature	453°C

10. STABILITY AND REACTIVITY

Reactivity: Stable at normal temperatures and pressure.

Conditions to Avoid: Temperatures above 48°C. Avoid contact with incompatible materials.

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Incompatibilities: Strong Oxidising Agents, Strong Acids
Explosive reactions may occur with strong oxidising agents.
Violent heat producing reactions may occur with strong acids.

Hazardous Decomposition: Thermal decomposition products include, carbon dioxide, and carbon monoxide.

Polymerisation: Will not polymerise.

11. TOXICOLOGICAL INFORMATION

Pad Kleen

Local Effects: Harmful by Ingestion. Irritant to, skin, eyes, and respiratory system.

Target Organs: Respiratory System, Central Nervous System, Eyes & Skin.

Classification of Hazardous Ingredients

Ingredients	R Phrases
Trichloroethylene	R20, R21, R22, R36/38, R45, R52/53, R66, R67
Isopropyl Alcohol	R36/37/38
Carbon dioxide	R 20

Individual Ingredient Information

Trichloroethylene

Irritation Data: Eye rabbit 100mg mild

Toxicity Data: LD₅₀ Human Oral 7000mg/kg, LC₅₀ Man Inhalation 2900ppm Repeated overexposure may cause progressive and potentially irreversible damage to the peripheral nervous system, particularly in arms and legs

Local Effects: Irritation eyes, nose throat; dizziness, drowsiness, headache, nausea; dried cracked skin; chemical pneumonitis.

Acute Toxicity Level: Toxic by inhalation at concentrations above TWA

Target Organs: Respiratory System, Central Nervous System, Eyes, Skin.

Mutagenic Data: No known applicable information

Reproduction Effects Data: No known applicable information.

Isopropanol

Irritation Data: Eye Rabbit 100mg severe, Eye Rabbit 10mg moderate.

Toxicity Data: Lowest published lethal dose, Oral human 3579mg/kg

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Local Effects: Decreased pulse rate, Arrhythmias, Coma

Acute Toxicity Level: Lowest published toxic dose, Oral human 223mg/kg,

Target Organs: Heart, & Kidneys

Mutagenic Data: Inhalation Rat 1030 ug/m³/16week

Reproduction Effects Data: lowest toxic concentration 3500ppm/7hrs (1-19days) stunted fetus.

Carbon Dioxide

Irritation Data: No known applicable information

Toxicity Data: Lowest recorded toxic effect in humans; 12500ppm (Dyspnea) Ref: NOISH, registry of Toxic Effects of Chemical Substances

Local Effects: Headache, dizziness, restlessness, paresthesia; dyspnea; sweating, malaise; increased heart rate, cardiac output, & blood pressure; coma; asphyxia; convulsions

Acute Toxicity Level: Lowest published lethal concentration in humans; 110,000ppm Ref: NOISH, registry of Toxic Effects of Chemical Substances

Target Organs: Respiratory System and Central Nervous System.

Mutagenic Data: No known applicable information

Reproduction Effects Data: Lowest published toxic effect on reproduction in mouse studies; 550,000ppm/2hrs in males, spermatogenesis. Ref: NOISH, registry of Toxic Effects of Chemical Substances

12. ECOLOGICAL INFORMATION

General Statement: This product contains green house gases. It is expected that this product will have adverse ecological effects. It is recommended that extreme caution be taken to avoid discharge to waterways, grasslands and other areas with local fauna and flora.

Ecotoxicity:

Fish	:Expected to be toxic: 1<LC/EC/IC50<=10mg/l.
Aquatic Invertebrates	:Expected to be toxic: 1<LC/EC/IC50<=10mg/l.
Algae	:Expected to be toxic: 1<LC/EC/IC50<=10mg/l.
Microorganisms	:Expected to be toxic: 1<LC/EC/IC50<=10mg/l.

Persistence and Degradability: Readily biodegradable. Oxidises by photo-chemical reactions in air..

Mobility: Floats on Water. Adsorbs on soil.

Bioaccumulation: Has potential to bioaccumulate.

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13. DISPOSAL CONSIDERATIONS

Refer to State/Territory Land Waste Management Authority for disposal; show this MSDS for their consideration. Empty containers not to be recycled or used for any other purpose. Dispose in accordance with local regulations.

14. TRANSPORTATION INFORMATION

UN No	1950
Proper Shipping Name	Flammable gas
ADG Code	Class 2.1
Sub Risk	None allocated
Packing Group	None allocated
Special Precautions	None
Hazchem Code	3[Y]E
EPG	2D2
Segregations	Yes

15. REGULATORY INFORMATION

SUSPD: Label as a Schedule 6 Poison in accordance with the SUSDP

AICS: All of the constituents of this material are listed on the ACIS.

16. OTHER INFORMATION

Issue Date: Initial

Reason(s) For Issue: Updated format to comply with NOHSC: 2011(2003).

Labelling Details

First line of Label must read: CAUTION Aerosol

Other statements to include:

R20	Harmful by Inhalation
R21	Harmful in contact with skin
R 22	Harmful if swallowed
R36/37/38	Irritating to eyes, skin & respiratory system.
R51/53	Toxic to aquatic organisms.
R66	Repeated exposure may cause skin dryness and cracking
R67	Vapours may cause drowsiness and dizziness
S2	Keep out of reach of children.
S14	Keep away from oxidisers and strong alkalis.
S23	Do not breathe the vapours.
S24/25	Avoid contact with the skin or eyes
S26	In case of contact with the eyes, rinse immediately with plenty of water and seek medical advise.
S28	After contact with skin, wash immediately with plenty of soap suds.
S33	Take precautionary measures against static discharges
S35	This material and its container must be disposed of in a safe way
S48	Risk of serious damage to health by prolonged exposure
S61	Avoid release to the environment.

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Abbreviations & Acronyms

SUSPD: Standard for the Uniform Scheduling of Drugs and Poisons
ADG: Australian Code for the Transport of Dangerous Goods by Road and rail
N.O.S. Not Otherwise Specified
CAS No: Chemical Abstracts Service Registry Number
UN No: United Nations Number
R-Phrases: Risk Phrases
S-Phrases: Safety Phrases
HAZCHEM Code: Hazardous Chemical emergency action code
NOHSC: National Occupational Health and Safety Commission
IARC: International Agency for Research into Cancer
ACIS: Australian Inventory of Chemical Substances
NTP: National Toxicology Program (USA)

Literary references:

Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(41999)]
National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC: 2011(2003)]
Exposure Standards for Atmospheric Contaminants in the Occupational Environment
Guidance Note [NOHSC: 3008(1995)] National Exposure Standards [NOHSC: 10005(1999)]
List of Designated Hazardous Substances [NOHSC: 10005(1999)]
Standard for the Uniform Scheduling of Drugs and Poison No. 17
The Australian Code for the Transport of Dangerous Goods by Road and Rail EDITION 6

Disclaimer

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product and in particular how to safely handle and use the product in the workplace.
Since Minehan Agencies Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace i.e. a risk analysis.
If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact Minehan Agencies Pty Ltd.