



MATERIAL SAFETY DATA SHEET

Product Name: Cyndan Citraerosol

Page: 1 of 5

This revision issued: November, 2009

Section 1 - Identification of Chemical Product and Company

Company Name & Address

Cyndan Chemicals
1/7 Jubilee Ave
Warriewood NSW 2102

Telephone: (02) 9998 5688 (Office hours)

Email: info@cyndan.com.au

Web: www.cyndan.com.au

Substance: Blend of ingredients.
Trade Name: **Cyndan Citraerosol**
Product Use: Cleaning solvent for electrical components, instruments and precision mechanical components.
Creation Date: **November, 2009**
This version issued: **November, 2009** and is valid for 5 years from this date.

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: Xn, Harmful. Xi, Irritating. Hazardous according to the criteria of SWA. Dangerous according to the Australian Dangerous Goods (ADG) Code.

Risk Phrases: R36, R20/21/22, R68/20/21/22. Irritating to eyes. Harmful by inhalation, in contact with skin, and if swallowed. Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

Safety Phrases: S20, S23, S38, S24/25, S36/37. When using, do not eat or drink. Do not breathe vapours or mists. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin and eyes. Wear suitable protective clothing and gloves.

SUSDP Classification: S5

ADG Classification: Class 2.2: Non-flammable, non-toxic gases.

UN Number: 1950, AEROSOLS

Emergency Overview

Physical Description & colour: Clear colourless liquid.

Odour: No data.

Major Health Hazards: symptomatology of methanol poisoning:

1. A latency usually of 12-18 hours, during which time the only clinical signs are those of a generally mild and transient state of inebriation as after ethanol.
2. Headache, anorexia, weakness, fatigue, leg cramps, vertigo, restlessness.
3. Nausea, occasionally vomiting and diarrhoea. Violent abdominal pain, back pain, leg pain.
4. Apathy or delirium progressing sometimes rapidly to coma. Rarely excitement, mania, and convulsions.
5. Dimness of vision with dilated pupils, reacting poorly, if at all, to light, followed often by bilateral blindness (transient or permanent). Eyes are often sensitive to pressure, and eye movements are painful.
6. Breathing is rapid and shallow, not usually deep and laboured as seen in other types of metabolic acidosis.
7. Mild tachycardia is common, but the blood pressure is usually well maintained.
8. Death in coma is due to respiratory failure or rarely to circulatory collapse.
9. Protracted convalescence with asthenia. Blindness is usually permanent. Product is harmful by inhalation, in contact with skin, and if swallowed, eye irritant.

Potential Health Effects

Inhalation:

Short term exposure: Available data shows that this product is harmful, but symptoms are not available. In addition product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort. Intentional misuse by deliberately concentrating and inhaling contents of aerosol containers can be harmful or fatal.

Long Term exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short term exposure: Major health effect from this product is misuse of the aerosol function. If sprayed continuously on skin or in eyes, it can cause frostbite.

Long Term exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short term exposure: If sprayed directly in the eye, this product will irritate. If spraying is prolonged, it may cause damage through frostbite.

Long Term exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short term exposure: Significant oral exposure is considered to be unlikely. Available data shows that this product is harmful, but symptoms are not available. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased.

Long Term exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.

NTP: Nitromethane is classified by NTP as reasonably anticipated to be carcinogenic to humans.

See the NTP website for further details. A web address has not been provided as addresses frequently change.

IARC: Nitromethane is classed 2b IARC - possibly carcinogenic to humans.

See the IARC website for further details. A web address has not been provided as addresses frequently change.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc, %	TWA (mg/m ³)	STEL (mg/m ³)
Methanol	67-56-1	<10	262	328
Nitromethane	75-52-5	<10	50	not set
Carbon dioxide	124-38-9	<10	22500	54000
1,1-Dichloro-1-fluoroethane	1717-00-6		not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

Inhalation: If symptoms of poisoning become evident, contact a Poisons Information Centre, or call a doctor at once. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

Skin Contact: Quickly and gently blot away excess liquid. Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and completely decontaminate them before reuse or discard.

Eye Contact: Quickly and gently wipe or blot material from eyes. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: There is a moderate risk of an explosion from this product if commercial quantities are involved in a fire. Firefighters should take care and appropriate precautions. Vapours from this product are heavier

MATERIAL SAFETY DATA SHEET

than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.

Fire decomposition products from this product are likely to be toxic and corrosive if inhaled. Take appropriate protective measures.

Extinguishing Media: Suitable extinguishing media are carbon dioxide, dry chemical, foam, water fog. Water fog or fine spray is the preferred medium for large fires. Try to contain spills, minimise spillage entering drains or water courses.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. There is a danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is full fire kit and breathing apparatus.

Flash point: No data

Upper Flammability Limit: No data.

Lower Flammability Limit: No data.

Autoignition temperature: 550°C

Flammability Class: No data.

Section 6 - Accidental Release Measures

Accidental release: This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, clean up, rinsing to sewer and put empty container in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Store in a cool, well ventilated area. Check containers and valves periodically for leaks. Check packaging - there may be further storage instructions on the label.

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

SWA Exposure limits	TWA (mg/m ³)	STEL (mg/m ³)
Methanol	262	328
Nitromethane	50	not set
Carbon dioxide	22500	54000

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

Eye Protection: Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.

Skin Protection: Prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. See below for suitable material types.

Protective Material Types: We suggest that protective clothing be made from the following materials: butyl rubber, Teflon, PE/EVAL.

Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above. Otherwise, not normally necessary.

Eyebaths or eyewash stations and safety deluge showers should be provided near to where this product is being used.

MATERIAL SAFETY DATA SHEET

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Clear colourless liquid.
Odour:	No data.
Boiling Point:	29°C at 100kPa
Freezing/Melting Point:	No specific data. Liquid at normal temperatures.
Volatiles:	No data.
Vapour Pressure:	No data.
Vapour Density:	No data.
Specific Gravity:	1.2 at 21°C
Water Solubility:	Mostly insoluble.
pH:	No data.
Volatility:	No data.
Odour Threshold:	No data.
Evaporation Rate:	No data.
Coeff Oil/water distribution:	No data
Decomposition temp:	250°C
Autoignition temp:	550°C

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: This product should be kept in a cool place, preferably below 30°C. Keep containers and surrounding areas well ventilated.

Incompatibilities: strong acids, strong bases, strong oxidising agents.

Fire Decomposition: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. Hydrogen chloride gas, other compounds of chlorine. Hydrogen fluoride gas and other compounds of fluorine. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

There is no data to hand indicating any particular target organs.

Toxicity: The following figures suggest that methanol is neither toxic nor even harmful. However, this product causes severe health problems and even death in ways not adequately measured by quick LD₅₀ measurements.

Oral (rat) LD₅₀: 5628 mg/kg.

Oral (mouse) LD₅₀: 7300 mg/kg.

Oral (monkey) LD₅₀: 7000 mg/kg.

Skin (rabbit) LD₅₀: 15,800 mg/kg.

Inhalation (rat) LC₅₀: 64,000 ppm, 4-hr exposure.

Skin Irritation (rabbit): Moderate, 20 mg, 24-hr exposure

Eye Irritation (rabbit): Moderate, 100 mg, 24-hr exposure

In human methanol poisoning, the transformation of methanol to formaldehyde and formic acid can cause metabolic acidosis and ocular injury. Repeated exposure to airborne concentrations in the range of 200 to 375 ppm have been associated with headaches, and at 1200 to 8300 ppm with damaged vision. Repeated skin contact can cause defatting dermatitis with dryness and cracking.

Repeated inhalation exposures to rats caused CNS and behavioural effects, and changes to the spleen. Repeated oral exposures to rats caused liver toxicity, CNS effects and behavioural changes.

Inhalation exposure of pregnant rats to very high concentrations of methanol in air, 7 hr/day on gestation days 1-19, produced foetotoxic effects (10,000 ppm) and birth defects (20,000 ppm), as well as maternal toxicity. No adverse effects were seen at 5,000 ppm. Pregnant rats administered methanol orally at very high dose levels (20-35 g/kg) on gestation day 10 produced foetotoxic effects, as well as maternal toxicity.

Other Data: None.

Classification of Hazardous Ingredients

Ingredient	Risk Phrases
Methanol	>=3%Conc<10%: Xn; R20/21/22; R68/20/21/22

Section 12 - Ecological Information

Insufficient data to be sure of status.

MATERIAL SAFETY DATA SHEET

However expected to biodegrade rapidly in soil, water, and air.

Section 13 - Disposal Considerations

Disposal: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Section 14 - Transport Information

ADG Code: 1950, AEROSOLS

Hazchem Code: 2YE

Special Provisions: 63, 190, 277

Limited quantities: ADG 7 specifies a Limited Quantity value of 1000mL for this class of product.

Dangerous Goods Class: Class 2.2: Non-flammable, non-toxic gases.

Packaging Group: Not set

Packaging Method: P003

Class 2.2 Non-Flammable, Non-Toxic gases shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 4.2 (Spontaneously Combustible Substances), and 5.2 (Organic Peroxides). They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.1 (Flammable Gases), 2.3 (Toxic Gases), 3 (Flammable Liquids), 4.1 (Flammable Solids), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents), 6 (Toxic Substances), 7 (Radioactive Substances), 8 (Corrosive Substances) 9 (Miscellaneous Dangerous Goods), Foodstuffs and foodstuff empties.

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

The following ingredient: Methanol, is mentioned in the SUSDP.

Section 16 - Other Information

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 th edition)
AICS	Australian Inventory of Chemical Substances
SWA	Safe Work Australia, formerly ASCC and NOHSC
CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC	International Agency for Research on Cancer
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
SUSDP	Standard for the Uniform Scheduling of Drugs & Poisons
UN Number	United Nations Number

CONTACT POINT

TELEPHONE (Business hours): (02) 9998 5688 Fax: (02) 9999 2086

National Poisons Information Centre: Dial 13 1126 (from anywhere in Australia)

THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER SHOULD READ THIS MSDS AND CONSIDER THE INFORMATION IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE INCLUDING IN CONJUNCTION WITH OTHER PRODUCTS. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY. THE RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This MSDS is prepared in accord with the SWA document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2011(2003)]
Copyright © Kilford & Kilford Pty Ltd, November, 2009.

<http://www.kilford.com.au/> Phone (02)9251 4532

MATERIAL SAFETY DATA SHEET