



Material Safety Data Sheet

Hazardous according to the criteria of NOHSC

-1. SUBSTANCE IDENTIFICATION/ PREPARATION AND COMPANY DETAILS

Product Name: ADHESIVE & LACQUER REMOVER

Supplier: Stelco Chemicals Pty Ltd

ACN: 660 842 321

Street Address: 46-48 Henderson Road

Rowville 3178

Australia

Telephone: +61 3 9763 5733

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Emergency Telephone Number: 0412 318 882

2. COMPOSITION/INFORMATION ON INGREDIENTS

Recommended use: Dry cleaning spotting agent.

Appearance: Pale, straw coloured liquid with a solvent odour.

Non-Hazardous Components	< 60%	-
Toluene 108-88-3	< 30%	R11,R20
Anionic Surfactant	< 9%	R36/38
Dichloromethane 75-09-2	< 9%	R40, Cat3 Carc

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

3. HAZARDS IDENTIFICATION

Hazardous according to criteria of NOHSC.

Hazard Category

Xn Harmful

Xi Irritant

R-phrases(s)

R20 Harmful by inhalation.

R36 Irritating to eyes.

R40(3) Possible risks of irreversible effects.

Classified as Dangerous Goods for the purpose of transport by road or rail. Refer to relevant regulations for storage and transport requirements.

Class 3 Flammable Liquid

Poisons Schedule (Aust) / Toxic Substance(NZ): S5

This material is a scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126)

Ingestion: Rinse mouth with water. Give water to drink. Do NOT induce vomiting. Seek immediate medical assistance.



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Eye contact: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Seek immediate medical assistance.

Skin contact: Wash contaminated skin with plenty of soap and water. Remove contaminated clothing and wash before reuse. If irritation occurs seek medical advice.

Inhalation: Remove victim from 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 until fully recovered. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have qualified person give oxygen through a face mask. If breathing has stopped apply artificial respiration at once. In event of cardiac arrest, apply external cardiac massage. Seek medical advice.

Notes to physician: Treat symptomatically

5. FIRE-FIGHTING MEASURES

Specific Hazards: Highly flammable liquid. May form flammable vapour mixtures with air. All potential sources of ignition (open flames), pilot lights, furnaces, spark producing switches and electrical equipment etc.) must be eliminated both in and near the work area. Do NOT smoke. Vapour may travel a considerable distance to source of ignition and flash back.

Fire fighting further advice: Highly flammable liquid. On burning may emit toxic fumes. Keep containers cool with water spray. Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of combustion.

Suitable extinguishing media: Foam, dry agent (carbon dioxide, dry chemical powder).

6. ACCIDENTAL RELEASE MEASURES

Shut off all possible sources of ignition. Clear area of all unprotected personnel. Wear protective equipment to prevent skin and eye contamination and inhalation of vapours. Contain - prevent runoff into drains and waterways. Use absorbent (soil, sand, vermiculite or other inert material). Collect and seal in properly labelled containers for disposal. If contamination of sewers or waterways has occurred advise the local emergency services.

7. HANDLING AND STORAGE

Storage: Store in well ventilated area. Store away from oxidising agents and sources of heat or ignition. Keep containers closed at all times - check regularly for leaks.

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

No value assigned for this specific material by the National Occupational Health and Safety Commission

However, Exposure Standards for constituents:-

Toluene: 8hr TWA = 377 mg/m³ (100ppm), 15min STEL = 565mg/m³ (150ppm)

Dichloromethane: 8hr TWA = 174mg/m³ (50ppm), Cat. 3 Carc., Sk

Ethyl Acetate: 8hr TWA = 720 mg/m³ (200ppm)

No Exposure Standards assigned to other constituents.

As published by the National Occupational Health and Safety Commission.

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



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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.

Carcinogen Category 3 – substances suspected of having carcinogenic potential. The available information is not adequate for making a satisfactory assessment.

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

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.

Engineering measures: Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. 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 protection equipment: OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES(S), RESPIRATOR.

Avoid skin and eye contact and inhalation of vapour. Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or reusing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: Pale straw coloured liquid with a solvent odour.

Solubility: Soluble in organic solvents. Insoluble in water.

Specific Gravity (20C)	: 0.9	Rel Vapour Density (air=1)	: > 1
Boiling Point (C)	: 90	Flash Point (C)	: 4 (toluene)
% Volatile by weight	: 91	Solubility in water (g/L)	: Insoluble

10. STABILITY AND REACTIVITY

Stability: Reacts with oxidising agents.

11. TOXICOLOGICAL INFORMATION

Main symptoms: No adverse health effects expected if the product is handled in accordance with this Safety data Sheet and the product label. Symptoms that may arise if the product is mishandled are:

Ingestion: Swallowing can result in nausea, vomiting and central nervous system depression. If the victim is uncoordinated there is a greater likelihood of vomit entering the lungs and causing subsequent complications.

Eye contact: An eye irritant.

Skin contact: Will have a degreasing action on the skin. Contact with skin may result in irritation. Repeated or prolonged skin contact may lead to irritant contact dermatitis.

Inhalation: Vapour may be irritant to mucous membranes and respiratory tract. Inhalation of vapour can result in headaches, dizziness and possible nausea. Inhalation of high concentrations can produce central nervous system depression, which can lead to loss of coordination, impaired judgement and, if exposure is prolonged, unconsciousness.

Long term effects: Evidence indicates that repeated or prolonged exposure to toluene could result in central nervous system disorders.(1)

Acute toxicity / Chronic toxicity



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No LD50 data available for product. The toxicity of the product may be attributed to the solvents it contains. Additive effects may occur with mixtures of solvents. Similar effects can occur where the consumption of alcohol is also involved.

However for the component toluene(1):

Oral LD50 (rat): 5580 mg/kg. Dermal LD50 (rabbit): 14000 mg/kg.

SKIN: (Draize): Mild to moderate irritant

EYES: (Draize): Mild irritant.

Dysfunction of the central nervous system is the primary human health concern following inhalation exposure to toluene. The major effects in humans following acute exposure to high concentrations (such as in deliberate sniffing or industrial accidents) are central nervous system dysfunction and narcosis.

Under controlled conditions, inhalation of 50, 75 or 100 ppm of toluene for 4 to 6 hours was associated with headache and irritation. There are also numerous reports of altered central nervous system performance among humans inhaling 40 ppm to more than 100 ppm.

Both bioassay tests and other available data (including two human studies) indicate that toluene is not carcinogenic. Based on available in-vivo data, studies of humans are inconclusive with regard to genotoxicity, while most in-vitro studies indicate negative results for toluene. While there have been some reported developmental effects in experimental animal testing involving toluene, studies do not provide evidence that toluene is teratogenic following inhalation.

For the component methylene chloride(2):

Oral LD50 (rat) 2100 mg/kg

Inhalation LC50 (rat): 200 mg/m³/15 minutes.

No adverse effects on blood count, blood pressure, pulmonary function, neurological function, cognitive function, alertness, and coordination were detected when healthy adults were exposed repeatedly to up to 250 ppm of methylene chloride for 7.5 hours/day, 5 days/week for two weeks or in the case of the male subjects, at 500 ppm on two consecutive days. Several major studies on human workers showed no casual relationship between exposure to methylene chloride and an increase in the evidence of cancer.

A chronic inhalation study in the mouse has shown that methylene chloride is carcinogenic in this species, when exposed to levels well above the exposure level, causing tumours both in the liver and the lung. Additional studies in the mouse, rat and the hamster have shown no further significant evidence of a carcinogenic effect. The effect in mice is specific to this species and is very unlikely to occur in humans. This is due to well established differences in the metabolic pathways between rodents and humans.

This material has been classified by the International Agency for Research on Cancer (IARC) as a Group 2B agent. Group 2B – The agent is possibly carcinogenic to humans.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

However, for the component methylene chloride(2):

Low toxicity to aquatic organisms.

24 hr LC50 (Lepomis macrochirus): 230 mg/L

48 hr LC50 (Daphnia magna): 224,000 ug/L

96 hr LC50 (fat head minnow): 193 mg/L

96 hr LC50 (Mysid shrimp): 256,000 ug/L

14 day LC50 (Poecilla reticulata) guppy: 294 ppm 14 day.

13. DISPOSAL CONSIDERATIONS

Refer to State Land Waste Management Authority. Advise flammable nature. Normally suitable for incineration by approved agent.



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14. TRANSPORT INFORMATION

Road and Rail Transport: Classified as Dangerous Goods for the purpose of transport by road or rail. Refer to relevant regulations for storage and transport requirements.

UN-No: 1993
Class: 3 Flammable Liquid
Hazchem code: 3[Y]E
EPG: 3A1
Packing group: Packing Group 2
Proper Shipping Name: FLAMMABLE LIQUID N.O.S. (contains Toluene and Methylene Chloride)

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), if both are in bulk, poison gases (Class 2.3), spontaneously combustible substances (Class 4.2), oxidising agents (Class 5.1), organic peroxides (Class 5.2) or radioactive substances (Class 7), however exemptions may apply.

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

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

15. REGULATORY INFORMATION

Hazardous according to criteria of NOHSC.

Hazard Category

Xn Harmful
Xi Irritant

R-phrases(s)

R11 Highly Flammable
R20 Harmful by inhalation
R36 Irritating to eyes.
R40(3) Possible risks of irreversible effects.

S-phrase(s)

S16 Keep away from sources of ignition – No smoking.
S23 Do not breathe vapour.
S24/25 Avoid contact with skin and eyes.
S33 Take precautionary measures against static discharges.
S36/37 Wear suitable protective clothing and gloves.

Poisons Schedule (Aust) / Toxic Substance (NZ): S5 Caution

16. OTHER INFORMATION

(1) Supplier Safety Data Sheet – Toluene;

(2) Supplier Safety Data Sheet – Methylene chloride; CDS/# 10281 – Orica Australia Pty Ltd

This Material Safety Data sheet has been prepared by Stelco Chemicals Pty Ltd

This MSDS summarises at the date of issue our best knowledge of the health and safety information of the product, and in particular how to safely handle and use the product in the workplace. As each workplace is different each user must, prior to use, review thus MSDS in the context of how the user intends to handle and use the product in the workplace.

If clarification of further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.