



Material Safety Data Sheet

Classified as Hazardous according to the criteria of ASCC

1. SUBSTANCE IDENTIFICATION/ PREPARATION AND COMPANY DETAILS

Product Name: INK REMOVER
Recommended Use: Dry Cleaning Spotting Agent

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. HAZARDS IDENTIFICATION

Classified as Hazardous according to the criteria of ASCC

Hazard Category

Xn Harmful

R-phrases(s)

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R36/37 Irritating to eyes and respiratory system

S-phrases(s)

S24/25 Avoid contact with skin and eyes

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Code (ADG Code) for transport by road or rail.

Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

Poisons Schedule (Aust) / Toxic Substance(NZ): S6.

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Non Hazardous Components	> 60%	-
2-butoxyethanol	111-76-2 10 - < 30%	R20/21/22 R36/37

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

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (Phone Australia 131 126; New Zealand 03 4747 000) or a doctor at once.

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



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Eye contact: If in eyes, hold eyelids apart and flush eye continuously with running water. Continue flushing until advised to stop by the Poisons information Centre, 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. If swelling, redness or blistering occurs seek medical advice. A component (2-butoxyethanol) can be absorbed through the skin with resultant toxic effects. Seek immediate medical advice.(1)

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 is 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 if effects persist.

Notes to physician: Treat symptomatically

5. FIRE-FIGHTING MEASURES

Specific Hazards: C1 - Combustible liquid.

Fire fighting further advice: Combustible liquid. On burning will emit toxic fumes including carbon monoxide and carbon dioxide. Keep 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: Water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

6. ACCIDENTAL RELEASE MEASURES

Small spill - Wash area down with excess water.

Larger spill - Wear protective equipment to prevent skin and eye contamination and inhalation of vapours. Contain - prevent run-off into drains and waterways. Use absorbent (soil, sand, vermiculite or other inert material). Neutralise with dilute acid. Collect and seal in properly labelled containers for disposal..

7. HANDLING AND STORAGE

Storage: Store in a cool, well ventilated area, out of direct sunlight. Store away from sources of heat or ignition, oxidising agents, foodstuffs and acids. Keep containers closed at all times - check regularly for leaks. Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the Requirements of AS 1940. Refer to state Regulations for storage and transport requirements.

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 occupational exposure limits:

No value assigned for this specific material by the National Occupational Health and Safety Commission. However, Exposure Standards for constituents:-

2-Butoxyethanol: 8hr TWA = 96.9mg/m³ (20ppm), 15 min STEL = 242mg/m³ (50ppm), Notices = 'Sk'

As published by the National Occupational Health and Safety Commission (ASCC).

TWA – the Time-Weighted Average airborne concentrations over an eight-hour working day, for a five-day working week over an entire working life. According to current knowledge this concentrations should not impair health or not cause undue discomfort to, nearly all workers.

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.



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'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. 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 / spray. 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: Colourless liquid with a mild odour.

Solubility: Soluble in water

Specific Gravity (20C)	: 1.04	Boiling Point (C):	100 (water)
Rel. Vapour Pressure (20C)	: > 1	Flash Point (C)	: > 70
% Volatile by weight	: 26.5	pH (1% aq.soln)	: 9.8-10.0
Solubility in water (g/L)	: miscible	Viscosity	: Not Available

10. STABILITY AND REACTIVITY

Stability: Reacts with oxidising agents and acids.

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, abdominal pain and loss of consciousness.

Eye contact: An eye irritant. Vapour can also irritate eyes.(1)

Skin contact: Contact with the skin will result in moderate irritation. Will have a degreasing action on the skin. A component (2-butoxyethanol) can be absorbed through the skin with effects as described in 'Ingestion'. Repeated or prolonged contact may lead to irritant contact dermatitis.

Inhalation: Vapour is irritant to mucous membranes and respiratory tract. Inhalation of higher 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: No information available for product.

Acute toxicity / Chronic toxicity

No LD50 data available for product.

For the component 2-Butoxy ethanol (1):

Oral LD50(rat): 530-3000 mg/kg*

Oral LD50 (guinea pig): 950 - 1414 mg/kg



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Dermal LD50(rabbit): 100-610 mg/kg*
Dermal LD50(guinea pig): 1200 - 2000 mg/kg
Inhalation LC50(rat): 450 – 490 ppm/4H

*Studies indicate older animals are more susceptible to haemolytic effects than younger animals. This may contribute to the large variation observed in oral and dermal LD50 values.

Early deaths in animals from high doses of 2-butoxyethanol have been attributed to narcosis while delayed deaths were attributed to lung and kidney damage which was probably secondary to haemolysis.

Long-term exposure to 2-butoxyethanol can cause blood changes, including anaemia, in rats. Both 2-butoxyethanol and its metabolite, butoxyacetic acid, can cause breakdown of red blood cells, however, in vitro and in vivo tests have shown that human red blood cells are comparatively insensitive to this effect.

Animal studies have shown that exposure to 2-butoxyethanol, during pregnancy, produced no selective teratogenic effects in the offspring. In the rat, foetotoxic effects were only observed at concentrations that also produced maternal toxicity (ie. 200 ppm). Also, 2-butoxyethanol did not produce testicular atrophy in male rats. Not genotoxic in a range of in vitro studies.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.
All components readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Refer to State Land Waste Management Authority. Decontamination and destruction of containers should be considered.

14. TRANSPORT INFORMATION

Road and Rail:

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by road or rail.

Air Transport (IATA):

Not classified as Dangerous Goods by the criteria of the International Air Transport Association Dangerous Goods Regulations for transport by air.

Marine Transport (IMDG):

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods code for transport by sea

15. REGULATORY INFORMATION

Hazardous according to criteria of NOHSC.

Hazard Category

Xn Harmful

R-phrases(s)

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R36/37 Irritating to eyes and respiratory system.

S-phrase(s)

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16. OTHER INFORMATION

(1) Supplier Safety Data Sheet

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 this 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.