



SAFETY DATA SHEET

1. IDENTIFICATION

PRODUCT(S): 4:1 HARDENER

Supplier In Australia: Concept Paints
Address: 26 - 30 Charles Street, St Marys, Australia. 2760
Telephone Number: +61 2 96732555
Emergency Telephone: +61 2 96732555 (Monday to Friday 8am to 5pm)

Supplier In NZ: Concept Paints NZ
Address: 39 Burrows Street, Tauranga, New Zealand
Telephone Number: +64 7 557 1638
Emergency Telephone: +64 7 557 1638 (Monday to Friday 8am to 5pm)

Recommended Use: Commercial and Industrial Coating

2. HAZARDS IDENTIFICATION

Classification:

- **HAZARDOUS SUBSTANCE.**
- **DANGEROUS GOODS.** (According to the criteria of ADG Code and NZ 5433.)

CLASSIFICATION	GHS CATEGORY	NZ CATEGORY	SIGNAL WORD	HAZARD STATEMENT
Flammable Liquids	2	3.1B	Danger	Highly flammable liquid and vapour.
Acute Toxicity – Oral	5	6.1E (Oral)	Warning	May be harmful if swallowed.
Acute Toxicity – Inhalation	4	6.1D (Inhalation)	Warning	Harmful if inhaled.
Skin Corrosion/ Irritation	3	6.3B	Warning	Causes mild skin irritation.
Eye Damage/ Irritation	2A	6.4A	Warning	Causes serious eye irritation.
Sensitisation – Respiratory	1A	6.5A	Danger	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Sensitisation – Skin	1B	6.5B	Warning	May cause allergic skin reaction.

Specific Target Organ Toxicity (Single Exposure)	3	6.9 (Narcotic)	Warning	May cause drowsiness or dizziness.
Hazardous To The Aquatic Environment – Long Term Hazard	4	9.1D	None	May cause long lasting harmful effects to aquatic life.

Hazard Symbols:



Precautionary Statements:

- Keep away from heat/sparks/open flames/ hot surfaces. No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilation/lighting/equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- Wear protective gloves/protective clothing/eye protection/face protection.
- In case of inadequate ventilation wear respiratory protection.
- Call a POISON CENTER or doctor/physician if you feel unwell.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- Rinse mouth.
- IF ON SKIN (or hair): Remove /take off immediately all contaminated clothing. Rinse skin with water/shower.
- If skin irritation occurs or rash occurs: Get medical advice/attention.
- Contaminated work clothing should not be allowed out of the workplace.
- Wash contaminated clothing before reuse.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
- If eye irritation persists: Call a POISON CENTER or doctor/physician.
- IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
- If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
- Collect spillage.
- Store in a well-ventilated place. Keep container tightly closed. Keep cool.
- Store locked up.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Entity / Hazardous Component	CAS Numbers	Proportion by wt.
N-Butyl Acetate	123-86-4	30 – 60%
Hexamethylene Diisocyanate Homopolymer	28182-81-2	30 – 60%
Methoxy Propyl Acetate	108-65-6	10 – 30%

This product(s) also contains <10% of other ingredients which are considered non-hazardous in accordance with ASCC/NOHSC and NZ HSNO criteria.

4. FIRST AID MEASURES

Route of Exposure	First Aid Measures
Ingestion:	Give a glass of water. Do NOT induce vomiting. Place patients head downwards if vomiting occurs. Prevent it entering lungs, as aspiration of material into the lungs can cause chemical pneumonitis which can be fatal. Immediately call a POISON CENTER or doctor/physician.
Eye:	Immediately irrigate with large quantities of water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists: Call a POISON CENTER or doctor/physician.
Skin:	Wash exposed area thoroughly with soap and water. Remove contaminated clothing. If skin irritation occurs: Get medical advice/attention.
Inhaled:	Give fresh air, careful not to become a casualty yourself. Remove and loosen clothing. If breathing is normal make patient comfortable and keep warm till recovered. If breathing is difficult ensure the airways are clear and have a qualified person give oxygen from a face mask. If breathing has stopped commence (EAR) and if cardiac arrest has occurred, commence (CPR) and get medical advice/attention urgently.
Advice To Doctor:	Treat Symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Foam, Carbon Dioxide or Dry Chemical Powder.

Hazards from Combustion Products: If involved in a fire, toxic materials such as carbon monoxide, carbon dioxide, nitrogen oxide, isocyanate vapour, traces of hydrogen cyanide, hydrogen chloride gas, hydrogen fluoride gas, various chlorine and/or fluorine compounds as well as hydrocarbons may form.

Precautions for Firefighters: Heating can cause rupture of containers with explosive force. If safe do so, remove all sources of ignition and any containers from the path of the fire. Keep cool with water spray.

Firefighters should wear self contained breathing apparatus with a full face and operated in the positive pressure mode.

Hazchem Code: 3[Y]E

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: In case of an accidental release or spill, evacuate the danger area. Wear the correct Personal Protective Equipment (See section 8 of SDS). Do not breathe vapours. Extinguish all ignition sources and shut off the source of the spill. Ventilate the area.

Environmental Precautions: Avoid release to the environment by bunding or covering drains.

Containment: Contain and absorb the spill with absorbent material such as sand, soil or vermiculite. Transfer the material into drums, using non-sparking tools. Seal and label the drums. Contact the appropriate waste management authority for disposal.

7. HANDLING AND STORAGE

Precautions For Safe Handling: Wear the correct Personal Protective Equipment (See Section 8 of the SDS) when using this product. Ground the container and receiving equipment whilst using. Only use non-sparking tools and take precautionary measures against static discharge.

Only use in a well-ventilated area or preferably apply the product in a spray paint booth with an adequate exhaust system and explosion-proof electrical, ventilation, and lighting equipment.

Never eat, drink or smoke whilst handling this product. Always wash hands thoroughly after using this product and before smoking, eating, drinking or using the toilet.

Conditions For Safe Storage: Keep containers away from heat/sparks/open flames/ hot surfaces. Store containers in a well-ventilated area and away sources of ignition, oxidising agents and/or foodstuffs. Store containers in a cool place and out of direct sunlight. Keep containers tightly closed when not in use and check regularly for leaks.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:	TLV –TWA (mg/m ³)
N-Butyl Acetate	713
Hexamethylene Diisocyanate Homopolymer	Not Available
Methoxy Propyl Acetate	274

Engineering Controls: Ensure sufficient ventilation to maintain concentration below exposure standard. Only use in a well ventilated area or preferably apply the product in a spray paint booth with an adequate exhaust system. Keep containers sealed when not in use. Earth any mixing vessels when using this product.

Personal Protection: Skin contact should be avoided by wearing impervious work clothing, boots and Neoprene or PVC gloves. Eyes should be protected by chemical goggles or safety glasses fitted with side shields (Refer to AS/NZS 1337). If an inhalation risk exists, an organic vapour respirator or a self-contained breathing apparatus, with a full face and operated in the positive pressure mode, should be used. Ensure cartridges are correct for the potential air contamination (Refer to AS/NZS 1715 and 1716).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear thin liquid.
Odour:	Strong solvent odour.
pH:	Not applicable.
Vapour Pressure:	1.2 kPa @ 20°C
Vapour Density:	Not Available
Boiling Point Range:	96 – 145 °C
Melting Point:	Not Applicable
Solubility In Water:	Not Available
Specific Gravity:	0.95 – 1.05
Flammability Limits:	1 (LEL) to 8% (UEL) by volume
Flash Point:	22 °C (Closed Cup)

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under ordinary conditions of use and storage.

Conditions to Avoid: Avoid all ignition sources.

Incompatible Materials: None

Hazardous Decomposition Products: If involved in a fire, toxic materials such as carbon monoxide, carbon dioxide, nitrogen oxide, isocyanate vapour, traces of hydrogen cyanide, hydrogen chloride gas, hydrogen fluoride gas and various chlorine and fluorine compounds and hydrocarbons may form.

Hazardous Reactions: Exothermic reaction with amines and alcohols. Reacts slowly with water forming Carbon Dioxide.

11. TOXICOLOGICAL INFORMATION

There is no data available on this product itself. The following information (where available) relates to the individual ingredients of the product.

Acute Toxicity – Oral:

Ingredient	Value (LD50)	Species	GHS Category
N-Butyl Acetate	3200 mg/kg	Rabbit	5

Health Effects: May be harmful if swallowed.

Acute: Can result in headaches, nausea, vomiting and diarrhoea.

Chronic: May cause irritation to the mucous membranes of the digestive system. May result in damage to the liver and kidney, blood disorders and may affect the central nervous system.

Acute Toxicity – Dermal:

Ingredient	Value (LD50)	Species	GHS Category
Not Available			

Health Effects:

Acute Toxicity – Inhalation:

Ingredient	Value (LC50)	Species	GHS Category
N-Butyl Acetate	~2mg/L	Rat	4
Hexamethylene Diisocyanate Homopolymer	18500 mg/m ³	Rat	4

Health Effects: Harmful if inhaled.

Acute: Vapour concentrations above exposure limits may be irritating to the respiratory tract, may cause headaches and dizziness. Prolonged exposure may result in unconsciousness.

Chronic: Vapour concentrations above exposure limits may cause irritation to the mucous membranes of the respiratory system. May result in damage to the liver and kidney, blood disorders and may affect the central nervous system.

Skin Corrosion/Irritation:

Ingredient	GHS Category
N-Butyl Acetate	3

Health Effects: Causes mild skin irritation.

Acute: Causes skin irritation.

Chronic: May cause dermatitis and eczema.

Eye Damage/Irritation:

N-Butyl Acetate
Methoxy Propyl Acetate

GHS Category

2A
2A

Health Effects: Causes serious eye irritation.

Acute: Causes redness, tearing or blurred vision.

Chronic: Will cause discomfort and may cause redness, itching or blurred vision.

Respiratory or Skin Sensitation:

Hexamethylene Diisocyanate Homopolymer
Hexamethylene Diisocyanate Homopolymer

GHS Category

1A
1B

Health Effects: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction.

Germ Cell Mutagenicity:

Not Available

GHS Category

Health Effects:

Carcinogenicity:

Not Available

GHS Category

Health Effects:

Toxic To Reproduction:

Not Available

GHS Category

Health Effects:

Specific Target Organ Toxicity (Single Exposure):

N-Butyl Acetate

GHS Category

3

Health Effects:

Specific Target Organ Toxicity (Repeated Exposure):

Not Available

GHS Category

Health Effects:

Aspiration Hazard

Not Available

GHS Category

Health Effects:

12. ECOLOGICAL INFORMATION

Environmental Precautions: Avoid release to the environment, the product should not be allowed to enter drains, water courses or the soil.

There is no data available on this product itself. The following information (where available) relates to the individual ingredients of the product.

Hazardous To The Aquatic Environment – Acute Hazard:

Ingredient	Value (LC50)	Species	GHS Category
Not Available			

Effects:

Hazardous To The Aquatic Environment – Long Term Hazard:

Ingredient	Value (LC50)	Species	GHS Category
N-Butyl Acetate	18 mg/L 96hr	Fish	4
N-Butyl Acetate	32 mg/L 48hr	Crustacean	4

Effects: May cause long lasting harmful effects to aquatic life.

Exotoxic To Terrestrial Vertebrates:

Ingredient	Value (LD50)	Species	NZ Category
Not Available			

Effects:

Persistence and Degradability: No information available.

Bioaccumulative Potential: No information available.

Mobility in Soil: No information available.

13. DISPOSAL CONSIDERATIONS

Contact the relevant waste management authority. Normally suitable for incineration by an approved agent.

14. TRANSPORT INFORMATION

ADG (Land):

Shipping Name: PAINT
UN Number: 1263
Hazard Class: 3
Subsidiary Risk: Not Applicable
Packaging Group: II
Hazchem: 3[Y]E

NZS 5433:

Shipping Name: PAINT
UN Number: 1263
Hazard Class: 3
Subsidiary Risk: Not Applicable
Packaging Group: II
Hazchem: 3[Y]E

IMGD (Sea):

Shipping Name: PAINT
UN Number: 1263
Hazard Class: 3
Subsidiary Risk: Not Applicable
Packaging Group: II
Marine Pollutant: No
EmS: F-E,S-E

ICAO/IATA (Air):

Shipping Name: PAINT
UN Number: 1263
Hazard Class: 3
Subsidiary Risk: Not Applicable
Packaging Group: II

15. REGULATORY INFORMATION

Poisons Schedule: Not Schedule d
HSNO Group Standard: HSR002662 - Surface Coatings and Colourants
(Flammable)

16. OTHER INFORMATION

Date of Issue: 05/07/13
Replaces Issue Dated: 01/02/10

The above information has been presented in good faith and is accurate to the best of our knowledge, at the time of preparation. All of the information supplied herein is related only to the health and safety issues of the product. Users should assume all responsibility for its use, as the conditions under which this product is used are beyond our control. For technical information on the use of this product users should consult the appropriate Technical Data Sheet.

END OF SDS