

Material Safety Data Sheet

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P164/2

Issue Date : September 2010

Issued by: *A. & I. Coatings*

Product Name : **VITREFLON V700 PACK B**

Classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

Product Name	VITREFLON V700 Pack B
Product Use	Component of a two pack coating used for long term decoration and protection of solid substrates, usually spray applied.
Company Name	Architectural and Industrial Coatings (ABN: 48 183 706 679)
Address	7 Lackey Road, MOSS VALE, N.S.W. 2577 AUSTRALIA
Emergency Tel.	A/H. 02 4868 1038
Telephone Number / Fax.	Tel: 02 4869 1441 Fax: 02 4869 3031

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	Name	CAS No.	Proportion
	n-Butyl Acetate	123-86-4	30 – 60%
	Ethyl Acetate	141-78-6	30 – 60%
	Aliphatic polyisocyanate	28182-81-2	10 – 30%
	1,2,4-Trimethylbenzene	95-63-6	0.1– 1%
	Hexamethylene diisocyanate monomer	822-06-0	0 – 0.05%
	Solvent naphtha, petroleum, light aromatic	64742-95-6	1 - <10

3. HAZARDS IDENTIFICATION

Highly flammable.
This product is only used when mixed with Pack A, therefore also consult Material Safety Data Sheet for Vitreflon V700 Pack A.
Harmful by inhalation.
Irritating to eyes and skin.

4. FIRST AID MEASURES

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 patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. In the event of cardiac arrest, apply external cardiac massage. Seek immediate medical advice.
Ingestion	Do NOT induce vomiting. Wash out mouth with water. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.
Skin	If skin or hair contact occurs remove contaminated clothing and wash contaminated skin and hair with plenty of soap and running water. Wash contaminated clothing before re-use. If swelling, redness, blistering, or Irritation occurs seek medical advice.
Eye	If contact with the eye(s) occur, wash with running water holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. In all cases of eye contamination it is a sensible precaution to seek medical advice.
First Aid Facilities	Eye wash and normal washroom facilities.
Advice to Doctor	Treat symptomatically. For advice, contact a Poisons Information Centre (Australia 131 126).

5. FIRE FIGHTING MEASURES

Extinguishing Media	Foam, dry agent (carbon dioxide, dry chemical powder)
Specific Methods	Highly flammable liquid. Keep containers cool with water spray. Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of combustion.

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5. FIRE FIGHTING MEASURES Continued....

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. Flameproof equipment necessary in area where this chemical is being used. Nearby equipment must be earthed. Vapour may travel a considerable distance to source of ignition and flash back.
Hazardous Combustion Products	On burning may emit toxic fumes which may include carbon monoxide, carbon dioxide, and hydrogen fluoride. Keep containers cool with water spray.
Decomposition Temp.	Not available.

6. ACCIDENTAL RELEASE MEASURES

Remove all sources of ignition. Increase ventilation. Evacuate all unnecessary personnel. Slippery when split. Wear self-contained Breathing apparatus (S.C.B.A.) and full protective clothing to minimize skin and eye exposure. If possible contain the spill. Place inert absorbent such as vermiculite, sand or dirt onto material. Prevent run off into drains and waterways. Use clean non-sparking tools to collect the material and place into a suitable labelled container. Do not dilute material but contain. Mop up the remaining material and place into the same container. If large quantities of this material enter the waterways contact the Environmental Protection Authority, or your local Waste Management Authority.

7. HANDLING AND STORAGE

Corrosiveness	Not Corrosive to aluminium.
Storage Regulations	For information on the design of the storeroom reference should be made to Australian Standard A.S.1940. The storage and handling of flammable and combustible liquids. Reference should also be made to any relevant Commonwealth, State or Territory regulations.
Storage	Store in a cool, dry, well ventilated area away from sources of ignition. This product should be stored away from foodstuffs and strong oxidizing agents. Keep containers closed at all times - check regularly for leaks. This material is a SCHEDULED (S6) POISON and must be stored, handled and maintained according to the appropriate Commonwealth Regulations. Labelling requirements of the Standard for Uniform Scheduling of Drugs and Poisons do not apply to a poison that is packed and sold solely for industrial, laboratory or manufacturing purposes; however is labelled in accordance with the National Occupational Health and Safety Commission's National Code of Practice for the Labelling of Workplace Substances.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Limits	Name	STEL		TWA		Footnote
		mg/m3	ppm	mg/m3	ppm	
	n-Butyl Acetate	950	200	713	150	
	Ethyl Acetate			720	200	
	Aliphatic polyisocyanate	0.7		0.2		(as - NCO)
	1,2,4-Trimethylbenzene			123	25	
	Hexamethylene diisocyanate	0.7		0.2		(as - NCO)
Other Exposure Information	No value assigned for this specific material by the National Occupational Health and Safety Commission (NOHSC). However, Exposure Standards for constituents are stated above. TWA - The Time-Weighted Average airborne concentrations over an eight-hour working day, for a five-day working 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. Peak Limitation - a ceiling concentration which should not be exceeded over a measurement period which should be as short as possible but not exceeding 15 minutes.					

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8. EXPOSURE CONTROLS, PERSONAL PROTECTION Continued....

Other Exposure Information	'Sk' notice - absorption through the skin may be a significant source of exposure. 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.
Personal Protective Equipment	
Respiratory	Positive pressure air supplied full face respirator preferred for long term use. Cartridge filter mask complying with AS 1716 for organic vapours acceptable for short periods depending on risk assessment.
Hands	Protective gloves, rubber or PVC recommended.
Eyes	Goggles recommended. Always wash hands before eating, drinking or using the toilet. Do not smoke. N.B. The final choice of appropriate personal protection will vary according to individual circumstances. This can include methods of handling and engineering controls as determined by appropriate applicator risk assessment. Apply in a spray booth fitted with an effective exhaust system and comply with local regulations applicable to spray painting. The Spray booth area should be isolated from other people whilst spraying is in progress and until all spray mist has been effectively dispersed. Catalysed product deteriorates on contact with moisture liberating gas. Take care when opening can as contents may be under pressure. Cover lid with cloth and remove lid slowly to prevent splashing. Avoid breathing dust when sanding. Wet sand or use a dust mask. Ensure exhaust air does not contaminate other work spaces and electrical equipment is in accordance with applicable regulations.
Eng. Controls	Ensure ventilation is adequate and that air concentrations of components are controlled below quoted exposure standards. Keep containers closed when not in use. Vapour heavier than air - Prevent concentration in hollows or sumps. Do NOT enter confined spaces where vapour may have collected.
Hygiene Measures	Ensure a high level of personal hygiene is maintained when using this product. Always wash hands before eating, drinking, smoking or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear mobile liquid.
Decomposition	Not available
Temperature	
Boiling Point	Not available
Melting Point	Not applicable
Solubility in Water	Insoluble
Solubility in Organic Solvent	Soluble in most organic solvents.
Specific Gravity (H₂O = 1)	0.95 Approx. @ 20°C
pH Value	Not applicable
Vapour Pressure	Not available
Vapour Density (Air = 1)	> 1 (Air = 1)
Evaporation Rate	Not available
Viscosity	20 seconds (Ford No. 4 Cup) @ 20°C
Volatile Component	66%
Flash Point	-4°C (Closed cup) - (Ethyl Acetate)
Flammability	HIGHLY FLAMMABLE LIQUID - Keep away from sources of ignition - No smoking. This product should be stored and used in a well ventilated area away from naked flames, sparks and other sources of ignition. Electrically link and ground metal containers for transfers of the product to prevent accumulation of static electricity. Keep container tightly closed

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9. PHYSICAL AND CHEMICAL PROPERTIES Continued...

Ignition Temperature Not available
Flammable Limits LEL 2.2% (Ethyl Acetate)
Flammable Limits UEL 11.5% (Ethyl Acetate)

10. STABILITY AND REACTIVITY

Stability Stable under normal use conditions.
Hazardous Will not occur.
Polymerization
Materials to Avoid Reacts with oxidizing agents. Exothermic reaction with amines and alcohols; Reacts slowly with water liberating carbon dioxide gas (CO₂), in closed containers risk of bursting owing to increase in pressure.

11. TOXICOLOGICAL INFORMATION

Toxicology Information No toxicity data is available for this specific product, however toxicity data for constituents are stated below.
Acute toxicity / Chronic toxicity
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.
For 2-Butoxyethanol acetate:
Oral LD50 (rat): 2400 mg/kg
Dermal LC50 (rabbit): 1500 mg/kg
Rats and rabbits survived a 4 hour exposure by inhalation to 4000 ppm with no ill effects.
For the solvent, n-Butyl Acetate:
Oral LD50 (rat): 10768 mg/kg
SKIN (rabbit): Moderate irritant
EYES (rabbit): Moderate irritant
For the Monomeric Hexamethylene diisocyanate:
Inhale LC50 (rat): 124 mg/m³ - 4 hour
Oral LD50 (rat): 710 uL/kg
HDI is a skin, eye, and mucous membrane irritant and a respiratory and dermal sensitizer (Hathaway et al 1991; Schmidt & Bomhard, 1983).
For the Polymeric Hexamethylene diisocyanate:
Oral LD50 (rat): >5000 mg/kg
Inhale LC50 (rat): 18500 mg/m³ - 1 hour
SKIN (rabbit): Moderate irritant
EYES (rabbit): Moderate irritant
Skin Sensitiser (guinea-pig) according to Magnusson/Kligman (maximizing test).
Inhalation Harmful by inhalation. Vapour may be an 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 co-ordination, impaired judgment and, if exposure is prolonged, unconsciousness.
Ingestion Swallowing can result in nausea, vomiting and central nervous system depression. If victim is unco-ordinated there is a greater likelihood of vomit entering the lungs and causing subsequent complications.
Skin Harmful in contact with skin. Contact with skin will result in irritation. Will have a degreasing action on the skin. Repeat of prolonged skin contact may lead to irritant contact dermatitis.
Eyes Irritating to eyes. On eye contact this product will cause tearing, stinging, blurred vision, and redness.
Chronic Effects Repeated exposure may cause skin dryness and cracking. For the minor component Hexamethylene diisocyanated; Inhalation of aerosol droplets during spray application is harmful and may cause respiratory sensitization of some susceptible workers with asthma-like symptoms. Repeated exposure may lead to permanent respiratory disability.

12. ECOLOGICAL INFORMATION

Environmental Protection Avoid contaminating waterways.

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13. DISPOSAL CONSIDERATIONS

Waste Disposal Disposal should be in accordance with the relevant local, state and federal government regulations. The recommended method is controlled incineration by approved agent.
Advise flammable nature.

14. TRANSPORT INFORMATION

This material is a Class 3 - Flammable Liquid according to The Australian Code for the Transport of Dangerous Goods by Road and Rail.

UN-No : 1263

Class : 3 Flammable Liquid

Hazchem code : 3[Y]E

Packaging group : Packaging Group II

Proper Shipping Name : PAINT RELATED MATERIAL

Segregation Dangerous Goods :

Class 3 - Flammable Liquids are incompatible in a placard load with any of the following:

- Class 1, Explosives
- Class 2.1, Flammable Gases, if both the Class 3 and Class 2.1 dangerous goods are in bulk
- Class 2.3, Toxic Gases
- Class 4.2, Spontaneously Combustible Substances
- Class 5.1, Oxidising Agents and Class 5.2, Organic Peroxides
- Class 6, Toxic Substances (where the flammable liquid is nitromethane)
- Class 7, Radioactive Substances.

U.N. Number 1263

Proper Shipping Name PAINT RELATED MATERIAL

DG Class 3 Flammable Liquid

Hazchem Code 3[Y]E

Packaging Method 5.9.3RTI

Packaging Group II

EPG Number 3CI

IERG Number 14

15. REGULATORY INFORMATION

Risk Phrase R36 Irritating to eyes.
R66 Repeated exposure may cause skin dryness and cracking.
R67 Vapours may cause drowsiness and dizziness

Safety Phrase S16 Keep away from sources of ignition - No Smoking.
S2 Keep out of reach of children.
S23 Do not breathe gas / fumes / vapour / spray.
S24/25 Avoid contact with skin and eyes.
S33 Take precautionary measures against static discharges.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S38 If insufficient ventilation, wear suitable respiratory equipment.
S51 Use only in well ventilated areas.

Poisons Schedule S6

Hazard Category Irritant

16. OTHER INFORMATION

Contact Person/Point EMERGENCY INFORMATION CONTACT: Mr. Peter Gillies
02 4869 1441 (business hours)
02 4868 1038 (after hours).

... End of MSDS ...

This information is, as of this date, true and accurate to the best of A. & I. Coatings' knowledge. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. Actual conditions of use and handling may require consideration of information other than, or in addition to, that provided herein.