



PVA Release Agent Clear

SAFETY DATA SHEET (SDS)

Section 1 - Identification of the Preparation and the Company

Product Name: **PVA Release Agent Clear**
Other Names: **None**

This product is classified as hazardous according to the criteria of Safe Work Australia.
Classified as a Dangerous Good according to the Australian Dangerous Goods Code (ADG).

Uses: Mould release agent.

Manufacturer: Summit Composites Pty Ltd

Address
Country
Telephone
Facsimile
Website
Poisons Information Centre

Western Australia

22 Port Kembla Drive
Bibra Lake WA 6163
+ 61 8 9418 4555
+ 61 8 9434 1489

<http://summitcomposites.com.au/>

Australia 131 126; New Zealand 0800 764 766

Victoria

51 Stephen Road
Dandenong South Vic 3175
+61 3 9792 2855
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Section 2 – Hazards Identification

DANGER



Flammable



Harmful

Hazard Statements

Flammable Liquid Category 2

H225: Highly flammable liquid and vapour.

Precautionary Statements

Prevention

P102 Keep out of reach of children
P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking.
P233 Keep container tightly closed.
P280 Wear protective gloves/eye protection/face protection

Response

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P370 + P378 In case of fire: Use carbon dioxide, dry chemical or foam for extinction

Storage

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal

P501 Dispose of contents/container to approved landfill

Section 3 - Composition/Information on Ingredients

| Ingredient(s) | CAS-number | %wt |
|-------------------|------------|--------|
| Ethanol* | 64-17-5 | 45-55% |
| Water | 7732-18-5 | 35-45% |
| Polyvinyl alcohol | 25213-24-5 | 5-15% |



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Alcohol phenol ethoxylate

9016-45-9

<0.5%

*Ethanol Denaturants may be one or more of the following: Methyl isobutyl ketone, fluorescein, diethyl phthalate, tertiary butyl alcohol, brucine sulphate or denatonium benzoate

Section 4 – First Aid Measures

Ingestion:

NEVER GIVE AN UNCONSCIOUS PERSON ANYTHING TO DRINK NOR ATTEMPT TO INDUCE VOMITING. If the person is conscious, rinse mouth out with water ensuring that mouthwash is not swallowed. Give about 250mL (2 glasses) of water to drink. DO NOT attempt to induce vomiting. Seek URGENT medical attention. For advice, contact a Poisons Information Centre (phone e.g. Australia 131 126; New Zealand 0800 764 766).

Inhalation:

Avoid becoming a casualty. DO NOT enter a hazardous area without adequate breathing protection. Remove to fresh air. Keep warm and at rest. If breathing is laboured, hold in a half upright position (this assists respiration). Apply artificial respiration if breathing has stopped. Seek URGENT medical attention for all but the most minor cases of over-exposure.

Eye Contact:

If in eyes, hold eyelids apart and flush the eye continuously with running water. 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 attention.

Skin Contact:

Remove contaminated clothing and wash thoroughly with soap and water. Use water alone, if soap is unavailable. Apply a moisturising hand cream, if available. Seek medical attention if any soreness or inflammation of the skin persists or develops later. Launder affected clothing before re-use

Additional Information:

First Aid Facilities: Normal washroom facilities are adequate for small volumes of this product. If large volumes are in use an eye wash station should be available.

***Advice to Doctor:** Treat symptomatically. Product contains denatured ethanol. Because of the risk of aspiration, gastric lavage should only be undertaken after endotracheal intubation.*

***Entry Route(s):** Inhalation, ingestion and skin and eye contact.*

Section 5 – Fire Fighting Measures

Highly flammable. Solvent vapours can form explosive mixtures with air in poorly ventilated conditions. Vapour is heavier than air and may travel along the ground, distant ignition is possible. May evolve toxic fumes if heated to decomposition or burned in a fire situation.

In case of fire, evacuate personnel to safe areas. Avoid breathing vapours or fumes. Responders must be made aware of the nature of the hazard and must wear self-contained breathing apparatus and full protective clothing (including helmet, coat trousers, boots and gloves). If safe to do so, move undamaged containers from fire area but DO NOT approach containers suspected of being hot. Undamaged and sealed containers may be kept cool by spraying with water.

Extinguish using carbon dioxide; dry chemical; protein-based foam; or alcohol-resistant foam. Solid water jets are not effective for fire fighting and may spread flames. Prevent, by any means possible, runoff from entering drains or water courses.

Section 6 – Accidental Release Measures

Avoid contact. Evacuate non-emergency personnel from area. Keep upwind of spill. Ventilate area. Use appropriate personal protective equipment (refer to Section 8 - Exposure Controls / Personal Protection).

Contain liquid to prevent contamination of soil, surface water or ground water. Prevent from entering, sewers or drains.

Cover with an absorbent such as earth, sand or a commercial oil absorber. Collect material in containers and remove to a well-ventilated area. Clean up floor areas. Wash area well with water. Test atmosphere for vapours to ensure safe working conditions before other personnel are allowed in the area.

Dispose by controlled incineration or to approved land-fill.



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Section 7 – Handling and Storage

Storage:

Store out of direct sunlight in a cool well-ventilated area. Area should be designated no smoking, away from all sources of ignition. Higher temperatures may cause pressure build up inside containers. Keep containers tightly closed when not in use. Protect containers against physical damage. Do not store in open containers. Damaged or punctured drums should be emptied and disposed of properly. Do not store with oxidising agents. Do not store in open containers. Damaged or punctured drums should be emptied and disposed of properly. Class 3 Flammable Liquids should not be transported or stored with goods of:

- Class 1 Explosives
- Class 2.1 Flammable Gases (where both flammable liquid and flammable gases are in bulk)
- Class 2.3 Poisonous Gases
- Class 4.2 Spontaneously Combustible Substances
- Class 5.1 Oxidising Agents
- Class 5.2 Organic Peroxides
- Class 6 Poisonous (toxic) Substances (where the flammable liquid is nitromethane)
- Class 7 Radioactive Substances

Flammable liquid according to AS1940 - Storage and Handling of Flammable and Combustible Liquids. Store in accordance with regulations for storage of flammable liquids.

Handling:

Use only with adequate ventilation. Provide general and / or local exhaust ventilation to ensure that the exposure standards are not exceeded. For Personal Protective Equipment (PPE), see Section 8.

Section 8 – Exposure Controls/Personal Protection

Exposure standards: Exposure standards have been allocated for the ingredient, ethanol.
Ethanol TWA: 1,000 ppm, 1880mg/m³

Exposure standards represent airborne concentrations of individual chemical substances, which according to current knowledge, should neither impair the health nor cause undue discomfort to nearly all workers. Exposure standard may be a time-weighted average (TWA), a short-term exposure limit (STEL) or a peak level.

Engineering Controls:

Ventilation requirements depend on the quantity of product in use and the method of application. Product may generate high vapour levels in confined or poorly ventilated areas. Ventilation should be sufficient to maintain vapour levels below the appropriate exposure standard. Use only in well ventilated areas unless forced air ventilation is employed, this is due to the fire hazard as well as the risks from inhalation. Work should be undertaken in a purpose-built spray booth if available. Ventilation systems should be installed and regularly monitored to ensure exposure to vapour/aerosol is minimised. Exhaust systems should be designed in accordance with workplace conditions. The air should always be moved away from the source of vapour generation and the person working at this point. The odour and irritancy of this material are inadequate to warn of excessive exposure.

Personal Protection:

Requirements are dependent on working conditions, quantity of product in use and method of application. For minor use: safety goggles and nitrile or butyl rubber gloves may be sufficient. If large quantities are in use: chemical resistant safety goggles, gloves or gauntlets and overalls. A half face respirator with organic vapour filter is required unless the area is well ventilated. In confined or poorly ventilated areas: air supplied breathing apparatus. Select and use respirators in accordance with AS/NZS 1715/1716. N.B. If using an air-purifying respirator, TAKE THE LIMITS OF ABSORPTION CAPACITY INTO ACCOUNT. CHANGE FILTERS REGULARLY.

Section 9 – Physical and Chemical Properties

Appearance: Hazy mobile liquid, characteristic, pungent, sweetish odour

Specific gravity (H₂O =1) 0.91-0.93

Boiling Point: 78°C

Melting Point: No data available

Solubility in Water: Completely miscible



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Vapour Pressure: 44mmHg @ 25°C

Vapour density (Air = 1): Heavier than air.

Flash Point: -17°C (Closed Cup)

Explosive limits (% By Volume in Air): LEL:3.5% UEL:19.0%

Section 10 – Stability and Reactivity

Stability: Stable under recommended storage and handling conditions. Highly flammable. Elevated temperatures may cause pressure build-up inside containers, and containers may explode if heated.

Hazardous Decomposition Products: Burning can produce carbon monoxide and/or carbon dioxide

Hazardous polymerisation: Will not occur.

Incompatibilities: Avoid all sources of ignition such as open flames, sparks, hot surfaces or burning cigarettes. The product may react with strong oxidising agents such as liquid or powdered chlorine, strong alkalis, strong mineral acids and bromine.

Conditions to Avoid: Excessive heat, ignition sources and incompatible materials. May degrade certain plastics

Section 11 – Toxicological Information

Symptoms of Exposure:

INGESTION: Irritating. May cause coughing, headache, dullness, abdominal spasm and diarrhoea. If vomiting occurs after ingestion, small droplets of the liquid may enter the lungs (aspiration) with the risk of chemical pneumonitis being induced. In serious cases there may be impairment of vision or visual disturbance due to the methanol and other additives used to denature the ethanol.

EYE: Liquid and high vapour concentration are irritating and may cause watering of the eyes.

SKIN: Brief contact may cause mild irritation. Prolonged or repeated contact may cause dryness and cracking of the skin and may contribute to dermatitis. Because of its volatility, skin absorption of acetone is unlikely to occur unless evaporation is prevented.

INHALATION: Highly volatile. Vapours are irritating to the eyes, nose and throat and affect the central nervous system, causing coughing, headache, nausea and dizziness. Higher concentrations may cause unconsciousness and coma. Death may result from severe and continued exposure.

Chronic Health Effects

Inhalation, and ingestion and skin contact are the routes of entry into the body. The liquid defats the skin and prolonged or repeated contact may contribute to dermatitis.

Toxicological Information

Ethanol (Ethyl Alcohol): LDLo (oral, human): 1400mg/Kg;

LD50 (oral, rat): 7060mg/Kg;

LDLo (skin, rabbit): 20g/Kg.

Although it is not directly applicable to industrial products, alcoholic beverages have been classified by the International Agency for Research on Cancer (I.A.R.C.) in Group 1 i.e. they are carcinogenic to humans. There is inadequate evidence for the carcinogenicity of ethanol and of alcoholic beverages in experimental animals. There is sufficient evidence for the carcinogenicity of alcoholic beverages in humans. The occurrence of malignant tumours of the oral cavity, pharynx, larynx, oesophagus and liver is causally related to the consumption of alcoholic beverages.

The metabolic effects of ethanol are due to a direct action of ethanol or its metabolites. Ethanol causes hyperglycemia or hypoglycemia depending on whether glycogen stores are adequate, inhibits protein synthesis and results in a fatty liver with elevations in serum triglyceride levels. Increases in high density lipoprotein cholesterol after ethanol ingestion may explain the lower risk of myocardial infarction and death from coronary disease after moderate drinking. Increases in serum lactate, resulting from the increased NADH/NAD⁺ ratio, and hyperurecemia, most likely the result of an increase in the turnover of adenine nucleotides, are common transient effects of ethanol ingestion. Causes of vitamin deficiencies in alcoholism are decreased dietary intake, decreased intestinal absorption, and alterations in vitamin metabolism. Ethanol decreases thiamine absorption and decreases the enterohepatic circulation of folate. Acetaldehyde increases the degradation of pyridoxal 5'-phosphate by displacing it from its binding protein and making it susceptible to hydrolysis by membrane bound alkaline phosphatase. Ethanol decreases hepatic vitamin A concentration and its conversion to active retinal, and modifies retinal metabolism of vitamin D.

Polyvinyl Alcohol

LD50 (oral, rat): >20g/Kg

Classified by the International Agency for Research on Cancer (I.A.R.C.) in Group 3 i.e. cannot be classified as to carcinogenicity to humans.



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Section 12 – Ecological Information

Do not allow to contaminate waterways, sewers, soil or vegetation. Ethanol is not persistent in the environment but alcohol phenol ethoxylate (0.5%) may be an environmental pollutant.

Ethanol naturally occurs as a plant volatile, microbial degradation product of animal wastes, and in natural fermentation of carbohydrates. When spilled on land it is apt to volatilise, biodegrade, and leach into the ground water, but no data on the rates of these processes could be found. Its fate in ground water is unknown. When released into water it will volatilise and probably biodegrade. It would not be expected to adsorb to sediment or bio concentrate in fish. Although no data on its biodegradation in natural waters could be found, laboratory tests suggest that it may readily biodegrade and its detection in water systems may be due in part to its extensive use in industry with possible relatively steady and large levels of discharges

When released to the atmosphere, will photo degrade in hours (polluted urban atmosphere) to an estimated range of 4 to 6 days in less polluted areas. Rainout should be significant.

Section 13 – Disposal Considerations

Do not allow into any sewers, drains, on the ground or into any body of water. Any disposal must be accordance with applicable State, Territory and/or Local government regulations. Dispose by controlled incineration or to approved land-fill. Product and container must be disposed as hazardous waste.

Section 14 – Transport Information

This product is a Class 3 Flammable Liquid according to the Australian Code for the Transportation of Dangerous Goods by Road and Rail (ADG Code).

UN Number: 1170
Proper shipping name: ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
DG Class: 3
Hazchem code: 2YE
Packing group: II
Packaging Instructions: P001, IBC02

Section 15 – Regulatory Information

Product is a not a Scheduled Poison according to the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

All ingredients are listed on the Australian Inventory of Chemical Substances (AICS).

Section 16 – Other Information

REFERENCES

1. List of Designated Hazardous Substances [NOHSC: 10005(1999)]
2. Safe Work Australia Code of Practice: Preparation of Safety Data Sheets for Hazardous Chemicals, 2016
3. Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC: 1003(1995)] and subsequent amendments
4. AS/NZS 1715 - Selection, use and maintenance of respiratory protective devices.
5. AS/NZS 1716 - Respiratory protective devices.
6. Australian Code for the Transportation of Dangerous Goods by Road and Rail (ADG Code), Edition, 7.4.
7. International Maritime Dangerous Goods Code (IMDG), and current amendments
8. Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) No. 15, November 2016



Summit
Composites Pty Ltd

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ABBREVIATIONS

| | |
|------|----------------------------------------------------------------------|
| LC50 | Lethal dose for 50% of test population, by inhalation. |
| LDLo | Lowest documented lethal dose |
| LD50 | Lethal dose for 50% of test population, by ingestion or skin contact |
| TDLo | Lowest published toxic dose |

User should verify applicability of this data sheet if more than 5 years old.

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