



SAFETY DATA SHEET

PVA MOULD RELEASE AGENT

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

Product name	PVA Mould Release Agent
Company	Easy Composites Ltd Unit 39 Park Hall Business Village Longton, Stoke-on-Trent ST3 5XA United Kingdom
Email	sales@easycomposites.co.uk
Telephone	+44 (0)1782 454499
Intended Use	As a mould release/parting agent for use when fabricating mouldings in composites layups.

2. HAZARDS IDENTIFICATION

Main hazards



Harmful



Flammable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredients	Concentration	CAS	CAS Symbols/Risk phrases
Ethanol	40-60%	64-17-5	F (R11)

4. FIRST AID MEASURES

Skin contact	Promptly wash affected area with soap and water. Remove contaminated clothing and wash before re-use.
Eye contact	Hold eyes open for at least 15 minutes under running water and obtain medical attention.
Inhalation	In extreme cases, move the exposed person to fresh air. Keep warm and at rest and obtain medical attention.
Ingestion	DO NOT INDUCE VOMITING. Give milk or water (not if person is unconscious) and obtain prompt medical attention.

5. FIRE FIGHTING MEASURES

Extinguishing media	Dry chemical, CO2, foam, sand and water spray.
Not to be used	Water jet may be ineffective.
Special fire-fighting procedures	Material is flammable and may explode in a fire. Cool containers exposed to flames from the side with water until well after the fire has been extinguished. Do not allow run-off from fire-fighting to enter drains or water courses.

Hazardous combustion products	Oxides of carbon and partially oxidised organic fragments of the product's main components may be produced.
Protective equipment	Suitable breathing apparatus may be required.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Remove all sources of ignition. Wear suitable protective clothing and avoid inhaling vapours. Provide adequate ventilation and evacuate non-essential personnel.
Environmental precautions	Confine spill. Do not allow product to enter sewers, rivers or open water.
Clean up methods	Contain and absorb with inert material and shovel to disposal. The absorbed waste will contain solvent residues and will be flammable. Store in a well-ventilated area. Inform authorities if large amounts are involved.

7. HANDLING AND STORAGE

Handling	Use with care and avoid spillage. Do not eat, drink or smoke. Avoid eye and skin contact and the inhalation of vapours.
Storage	Store in a cool, dry, well-ventilated area. Keep in tightly-closed, clearly-labelled containers. Isolate from sources of heat and ignition. Flammable liquid storage required.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits	Ethanol; occupational exposure standard: 1000ppm (long term exposure, 8 hours). No short-term standard published.
Respiratory protection	Local exhaust ventilation and/or suitable respiratory protection is recommended during spraying operation, for the use of large quantities of this product or if the OES is exceeded.
Hand protection	Chemically-resistant gloves should be worn when handling this material. Frequent or prolonged skin contact should be avoided.
Eye protection	Chemically-resistant gloves should be worn when handling this material. Frequent or prolonged skin contact should be avoided.
Industrial hygiene	Good standards of industrial hygiene are required for the use of this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Description	Liquid.
Colour	Blue (RA10, RA12)
Odour	Alcohol
pH	n.d.
Boiling Point	>75°C
Flash point	Approximately 23°C (Closed Cup Method)
Specific gravity ASTM D 1475	Not determined
Miscibility in water	Miscible
Auto-ignition temperature	422°C (ethanol)
Vapour density	> air
Explosive properties	Lower 4.3 vol% (ethanol) Upper 19.0 vol%

10. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended handling and storage conditions.
Conditions to avoid	Sources of heat and ignition.
Substances to avoid	Oxidising agents, strong acids and strong alkalis.
Hazardous decomposition products	Carbon dioxide, carbon monoxide, oxides of nitrogen and smoke may be produced if material is exposed to high temperatures.

11. TOXICOLOGICAL INFORMATION

No toxicological data related to the preparation are available.

The following toxicological assessment is based on a knowledge of the toxicity of the product's components

Toxicological information

Inhalation	High concentrations of vapour are irritating to the respiratory tract and the eyes and may cause headaches, dizziness, anaesthesia and other CNS effects.
Ingestion	Ingestion of large quantities of this material may cause nausea and sickness. Small amounts of liquid aspirated during ingestion or vomiting may cause lung damage.
Skin	Frequent or prolonged exposure may cause skin irritation and may lead to dermatitis.
Eyes	May cause irritation to the eyes.
Chronic Effects	Repeated or prolonged exposure to vapours may lead to chronic upper respiratory irritation.

12. ECOLOGICAL INFORMATION

Mobility	Mobile liquid. Contains volatile components. Soluble in water.
Persistence and degradability	Product is biodegradable.
Bioaccumulative potential	Not expected to bioaccumulate.
Ecotoxicity	LC50 (trout, 96 hour): 11400 mg/dm ³ (ethanol) LC50 (daphnia magna, 96 hour): 8300 mg/dm ³ (polyvinyl alcohol)

13. DISPOSAL CONSIDERATIONS

Product	Recover if possible. In doing so, comply with the local and national regulations currently in force.
Empty packaging	Empty packages may contain flammable residues and should be disposed of in a manner acceptable to local authorities.

14. TRANSPORT INFORMATION

Classification for transport FLAMMABLE LIQUID.

Proper Shipping Name ETHANOL SOLUTION

ADR/RID

UN	1170	Packing group III
Class	3	Hazard ID 90

IMDG

UN	1170	Packing group III
Class	3	Marine pollutant: NO
EmS Code	F-A S-F	

IATA

UN	1170	Packing group III
Class	3	Subsidiary risk
Packing Instruction (Cargo)		
Packing Instruction (Passenger)		

15. REGULATORY INFORMATION**Classification for supply**

Flammable

Labelling

The product is classified in accordance with 67/548/EEC.

Symbols

Flammable

**Risk phrases**

R10 - Flammable

Safety phrasesS43 – In case of fire use dry chemical, CO₂, foam, sand or water spray (not water jet).

S51 - Use only in well ventilated areas.

Statutory Instruments

Health & Safety at Work etc. Act 1974.

Chemicals (Hazards, Information & Packaging for supply) Regulations 2002

Carriage of Dangerous Goods and use of Transportable Pressure Equipment Regulations 2005.

Control of Substances Hazardous to Health Regulations 2002.

Environmental Protection Act 1990.

16. OTHER INFORMATION**Further information**

ISSUED IN ACCORDANCE WITH REGULATION (EC) NO: 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL.

The following references (available from the HSE) provide further information on specific aspects:

HS(G) 51 Storage of flammable liquids in containers.

HS(G) 140 The safe use and handling of flammable liquids.

EH 40/2005 Workplace exposure limits.

L5 COSHH 2002 Approved code of practice and guidance.