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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: PVA Release Agent **Product code:** RA10 PVA Release Agent Blue Gloss RA11 PVA Release Agent Clear Gloss RA12 PVA Release Agent Blue Matt RA13 PVA Release Agent Clear Matt

1.2 Relevant identified uses of the substance or mixture and uses advised against Application of the substance / the mixture Mould release agents for composite mouldings.

For industrial or professional use only

1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier: Llewellyn Ryland Ltd Haden Street, Birmingham B12 9DB, United Kingdom Tel: +44 (0)121 440 2284 Fax: +44 (0)121 440 0281 Email: technical@llewellyn-ryland.co.uk

1.4 Emergency telephone number: Llewellyn Ryland Ltd, Tel: +44 (0)121 440 2284 (office hours only, 7am - 7pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 3 H226 Flammable liquid and vapour.

Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.

Hazard pictograms



Signal word Warning

Hazard statements

H226 Flammable liquid and vapour. H319 Causes serious eye irritation.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.P280 Wear eye protection/face protection.

P337+P313 If eye irritation persists: Get medical advice/attention.

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

P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

Additional information:

EUH208 Contains 2-methylisothiazol-3(2H)-one. May produce an allergic reaction.

2.3 Other hazards Vapours may form ignitable mixture with air.

Results of PBT and vPvB assessment

This mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

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Description: Mixture of substances listed below with non-hazardous additions.

Dangerous components:		
	ethanol Flam. Liq. 2, H225; Eye Irrit. 2, H319	25 - 50%
		≤ 2.5%
EINECS: 220-239-6 Index number: 613-326-00-9	2-methylisothiazol-3(2H)-one Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 2, H330; Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1); Skin Sens. 1A, H317, EUH071 Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.0015 %	< 0.0015%

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

In case of accident or if you feel unwell seek medical advice immediately (show label or SDS where possible).

After inhalation:

Remove person to fresh air and keep comfortable for breathing. Seek medical treatment in case of complaints.

After skin contact:

Remove all contaminated clothing immediately. Drench the affected skin with plenty of water. In case of redness or irritation, consult a doctor.

After eye contact:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, get medical advice/attention.

After swallowing:

Rinse out mouth with plenty of water. If symptoms of indisposition persist, seek medical advice. Do not induce vomiting without medical advice.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: CO2, dry chemical powder, foam or water spray For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

5.3 Advice for firefighters

Protective equipment:

In the case of fire wear self-contained respiratory equipment and protective suit.



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Do not inhale explosion gases or combustion gases.

Additional information

Evacuate area and remove all ignition sources.

Cool endangered receptacles with water spray. Contain runoff to prevent entry into water or drainage systems. Dispose of fire debris and contaminated fire fighting water according to the regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Please notice instructions for person-related safety precautions, wear protective equipment (see 8.) Keep people at a distance and stay on the windward side.

Ensure adequate ventilation.

Turn leaking containers leak-side up to prevent the escape of liquid. Keep away from ignition sources.

6.2 Environmental precautions:

Do not allow to enter sewers, surface or ground water. Contain the spilled material by bunding.

6.3 Methods and material for containment and cleaning up:

Absorb with non-combustible absorbent material, (eg sand, diatomite, vermiculite). Place into suitable and labelled containers for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

6.4 Reference to other sections

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Prevent formation of aerosols. Avoid any contact with skin, eyes and clothes. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Wash hands before break and at the end of work.

Information about fire - and explosion protection:

Keep away from heat, sparks, open flames and hot surfaces. No smoking. Protect against electrostatic charges. Use explosion-proof apparatus / fittings and spark-proof tools. Ground and bond container and receiving equipment.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles: Store in tightly closed containers in a cool and well ventilated place. Protect from heat and direct sun.

Information about storage in one common storage facility: Do not store food, beverages and animal feeding stuffs in the storage area. Store away from strong acids or strong oxidising agents.

Further information about storage conditions: Keep container tightly sealed.

7.3 Specific end use(s) Use only according to instructions.



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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 64-17-5 ethanol

WEL (Great Britain) Long-term value: 1920 mg/m³, 1000 ppm

CAS: 67-56-1 methanol

WEL (Great Britain) Short-term value: 333 mg/m3, 250 ppm; Long-term value: 266 mg/m3, 200 ppm; Sk

Regulatory information WEL (Great Britain): EH40/2020

8.2 Exposure controls

Appropriate engineering controls Provide sufficient ventilation, particularly in closed areas.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Avoid unnecessary contact with the product. Do not eat, drink or smoke at workplace. Remove contaminated clothing and wash carefully before reuse. Do not breathe gas/vapours/spray. Be sure to clean skin thoroughly after work and before breaks.

Respiratory protection: Not necessary in compliance with instructions for use.

Hand protection

Chemical resistant gloves

Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed.

Material of gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection

Tightly sealed goggles (EN 166) Ensure eye bath is to hand.

Body protection: Protective clothing recommended.

Environmental exposure controls Do not allow to enter sewers/ surface or ground water.

SECTION 9: Physical and chemical properties

1 Information on basic physical and chemica Physical state	Fluid
Physical state	
Form:	Liquid
Colour:	According to product specification
Odour:	Characteristic
Odour threshold:	No data available
Boiling point or initial boiling point and boil	ing range: No data available
Flammability:	No data available.
Lower and upper explosion limit:	No data available.
Flash point:	23 °C
Auto-ignition temperature:	No data available.
pH:	8
Viscosity	
dynamic:	No data available.
kinematic at 25 °C:	0.45 - 0.55 St



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Solubility		
water:	No data available.	
Partition coefficient, n-octanol/water:	No data available.	
Vapour pressure:	No data available.	
Vapour density:	No data available.	
Density:	No data available.	
9.2 Other information		
Explosive properties:	No data available	
Oxidising properties:	No data available.	
Information with regard to physical hazard class	ses	
Explosives	Void	
Flammable gases	Void	
Aerosols	Void	
Oxidising gases	Void	
Gases under pressure	Void	
Flammable liquids	Flammable liquid and vapour.	
Flammable solids	Void	
Self-reactive substances and mixtures	Void	
Pyrophoric liquids	Void	
Pyrophoric solids	Void	
Self-heating substances and mixtures	Void	
Substances and mixtures, which emit flamma	able	
gases in contact with water	Void	
Oxidising liquids	Void	
Oxidising solids	Void	
Organic peroxides	Void	
Corrosive to metals	Void	
Desensitised explosives	Void	

SECTION 10: Stability and reactivity

10.1 Reactivity Stable under recommended transport or storage conditions.

10.2 Chemical stability Stable at ambient temperature and under normal conditions of use.

10.3 Possibility of hazardous reactions Vapours may form ignitable mixture with air.

10.4 Conditions to avoid Keep away from heat, sparks, open flames and hot surfaces.

10.5 Incompatible materials: Strong acids, strong oxidising agents

10.6 Hazardous decomposition products: Decomposes at high temperatures may form toxic gases.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification: No further relevant information available.

Skin corrosion/irritation Based on available data, the classification criteria are not met.
Serious eye damage/irritation
Causes serious eye irritation.
Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met. **Carcinogenicity** Based on available data, the classification criteria are not met. **Reproductive toxicity** Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.



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STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: For the product there are no ecotoxicological data available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment Not applicable.

12.6 Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation Transfer to a suitable container and arrange for collection by specialised disposal company.

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

Not completely emptied packaging is to be disposed of in the same manner as the product.

SECTION 14: Transport information		
14.1 UN number or ID number ADR, IMDG, IATA	UN1170	
14.2 UN proper shipping name ADR IMDG IATA	1170 ETHANOL (ETHYL ALCOHOL) solution ETHANOL (ETHYL ALCOHOL) solution ETHANOL solution	
14.3 Transport hazard class(es)		
ADR Class Label IMDG, IATA Class	3 (F1) Flammable liquids. 3 3 Flammable liquids.	
Label	3	
14.4 Packing group ADR, IMDG, IATA		
14.5 Environmental hazards:	Not applicable.	
14.6 Special precautions for user Hazard identification number (Kemler code):	Warning: Flammable liquids. 30	
14.7 Maritime transport in bulk according to IMC instruments	D Not applicable.	



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UN "Model Regulation":

UN 1170 ETHANOL (ETHYL ALCOHOL) SOLUTION, 3, III

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso category P5c FLAMMABLE LIQUIDS

National regulations: -

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

Relevant phrases

- H225 Highly flammable liquid and vapour.
- H301 Toxic if swallowed.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H330 Fatal if inhaled.
- H331 Toxic if inhaled.
- H370 Causes damage to organs.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

EUH071 Corrosive to the respiratory tract.

Further information:

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008: Calculation method

Date of previous version: 09.07.2015

Abbreviations and acronyms:

CLP: REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures CAS: Chemical Abstracts Service (division of the American Chemical Society) EINECS: European Inventory of Existing Commercial Chemical Substances WEL: workplace exposure limit PBT: persistent, bioaccumulative and toxic properties vPvB: very persistent and very bioaccumulative properties ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IATA: International Air Transport Association IMDG: International Maritime Code for Dangerous Goods Flam. Liq. 2: Flammable liquids - Category 2 Flam. Liq. 3: Flammable liquids - Category 3 Acute Tox. 3: Acute toxicity – Category 3 Acute Tox. 2: Acute toxicity – Category 2 Skin Corr. 1B: Skin corrosion/irritation - Category 1B Eye Dam. 1: Serious eye damage/eye irritation - Category 1 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 Skin Sens. 1A: Skin sensitisation – Category 1A STOT SE 1: Specific target organ toxicity (single exposure) - Category 1 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

Data compared to the previous version altered: Section 1,2,3,4,5,6,7,8,9,11,12,15,16

