



Richco Liquid Vinyl (with Flake)

DESCRIPTION

Richco Liquid Vinyl is a heavy duty self levelling resin system which provides excellent resistances to abrasion, chemical attack and other physical aggression. Richco Liquid Vinyl can incorporate a coloured flake to provide a seamless, decorative anti-slip finish.

USES

Richco Liquid Vinyl is suitable for the use where a hardwearing seamless finish is required. It is widely used on canteen areas, kitchens, shop floors, offices etc. Richco Liquid Vinyl can be used to replenish various floor finishes, such as terrazzo, concrete, timber etc.

ADVANTAGES

- Good self-levelling properties.
- Easy to clean.
- Hygienic.
- Good chemical resistance.
- Solvent free.
- Choice of colour range.
- Hardwearing
- Excellent adhesion to a variety of substrates.
- Good colour and colour stability.
- Good curing performance at low temperatures.
- Good surface finish, (free from pin-holes).

COLOUR RANGE

Richco Liquid Vinyl is available in a wide range of colours. Our standard colours range is: Racing Green, Bright Green, Bright Blue, Blue, Safety Yellow, Buff, Cherry Red, Bright Red, Dark Grey, Mid-Grey, Light Grey and Black.

Non-standard colours are available although there is an extra charge of between 5% -10%.

SURFACE PREPARATION

To achieve the best performance out of any of our flooring systems, preparation is very important, this cannot be over-emphasised, insufficient attention to this step in the application, may cause premature failure in an otherwise sound floor. New concrete should be at least 21 - 28 days old or the moisture content must be less than 5%. The substrate should be clean, free from laitance, oil, grease or other agents that may impair adhesion. Techniques should include one or more of the following, depending on how contaminated the substrate is; - acid etching, light mechanical scabbling, blasting, grinding or degreasing. Existing floors should be sound and preparation methods may involve repairing areas using Richco PU Repair Mortar or other Richco products.

PRIMING

Priming of all surfaces should be undertaken with Richco E-Coat Primer. Richco E-Coat Primer is applied to the prepared substrate by roller, brush or squeegee ensuring a continuous film over the entire floor area. Richco E-Coat Primer should be allowed to cure for a minimum of 12 hours prior to the application of Richco Liquid

Vinyl. (Maximum over-coating time at 20° C - 48 hours).

MIXING

Richco Liquid Vinyl is supplied in pre-weighed packs. Add full contents of hardener into the pigmented resin container and mix via paddle drill for at least 3 minutes or until a homogeneous mix is obtained, paying special attention to scrape and incorporate materials from the sides and base of the container.

APPLICATION

Apply Richco Liquid Vinyl to the pre-primed areas levelling to the required thickness with a steel notched trowel and aided by a spiked roller.

COVERAGE RATES

Richco Liquid Vinyl is supplied in 10kg units.

3.16m ² /unit	@ 2mm (approx)
2.11m ² /unit	@ 3mm (approx)

CURE SCHEDULE

Pot Life	20 mins @ 20° C
Initial Film Set Time	4 hrs @ 20° C
Light Traffic	12-16 hrs @ 20° C
Heavy Traffic	36 hrs @ 20° C
Full Cure / Chemical Resistant	4 days @ 20° C

TECHNICAL DATA

Elongation at break to BS.2782	70%
Hardness Shore 'D'	62
Tensile Strength to BS.2782	7N/mm ²
Tear Strength to BS903 die 'C'	33N/mm ²
Compressive Strength to BS.6319 no failure (85% recovery)	90N/mm ²
Taber abrasion - dry CS10/1000 cycles / 1kg	80mg
Taber abrasion - dry H18/1000 cycles / 1kg	400mg

CLEANING

Richco Tool Cleaning Solvent should be used to clean tools.

HEALTH & SAFETY

It is recommended that barrier creams, gloves and protective clothing be used when working with Richco Liquid Vinyl, Richco E-Coat Primer and Richco Tool Cleaning Solvent. For full details see separate Health & Safety Data Sheet.

TECHNICAL INFORMATION

For further information on this or any other Richco Products, please contact us on:
01268 495 730



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RESIN

1) Identification of substance:

Product Details - Resin component of the formulated polyurethane system
Trade Names - Richco Liquid Vinyl
Supplier - Richco Ltd - (Tel : 01268 495730)
Information - Technical Department

2) Hazard Identification

Designation Xi - Irritant
Information R36/38: Irritating to eyes and skin.
R41 - Risk of serious damage to eyes.
General Notes: If product is mixed with water, a potentially hazardous alkaline solution is produced. If this comes into contact with the eyes or skin, it may cause serious burns and ulceration. The eyes are particular vulnerable. Chemical burns can develop without pain being felt at the time.

3) First aid measures

GENERAL: Remove soiled clothing immediately.

INHALATION: Move victim to fresh air and allow to rest. In case of breathing difficulties or distress, seek medical attention.

INGESTION: Immediately rinse mouth with water and seek medical attention. If this is not immediately available, drink one or two pints of water.

SKIN: Remove all contaminated clothing. Wash immediately with plenty of soap and water. In case of persistent irritation / rash, seek medical attention.

EYES: Rinse immediately with plenty of water. Continue for 15 minutes and seek medical attention.

4) Fire fighting measures

EXTINGUISHING MEDIA: Product is not combustible.

SPECIAL HAZARDS: Avoid formation of dust clouds.

PROTECTIVE EQUIPMENT: Self contained breathing apparatus, PVC boots, gloves and protective clothing.

5) Accidental Release Measures

SPILL CLEAN-UP METHODS:

SAFETY PRECAUTIONS: Avoid skin and eye contact. Do not breathe dust. Wear goggles / visor, impervious gloves and protective clothing. Ensure area is well ventilated or use respiratory protection.

ENVIRONMENTAL PRECAUTIONS: Remove sources of ignition. Do not allow product to reach sewage system or any water cellars. Inform respective authorities in case of seepage into water course or sewage system.

CLEAN-UP PROCEDURES: Transfer dry product into a suitable container for disposal. Minimise generation of airborne dust.

6) Handling and Storage

USAGE PRECAUTIONS:

HANDLING REQUIREMENTS: Ensure good ventilation. Avoid contact with skin and eyes. Avoid dusting.

STORAGE CONDITIONS: Keep containers properly sealed and store in a cool location. Keep away from moisture.

7) Exposure controls/personal protection

PROTECTION:

CAS No.	65997-15-1
Material	Portland Cement
% Type Value Units	<10
Total inhalable dust OES	(8 hr TWA) 10mg m-3
Respirable dust OES	(8 hr TWA) 5 mg m-3 1305-62-0
Calcium hydroxide	<5 OES (8 hr TWA) 5mg m-3

RESPIRATORY PROTECTION: Wear suitable respiratory protection equipment if exposure to atmospheric dust levels above the occupational exposure standard likely.

HAND PROTECTION: Protective gloves.

SKIN PROTECTION: Protective clothing with elasticated cuffs and closed neck. Boots made of PVC.

EYE PROTECTION: Dust proof goggles.

HYGIENE MEASURES: Keep away from foodstuffs, beverages and feed. Remove all soiled / contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid breathing dust.

8) Physical and Chemical Properties

Appearance	Solid
Colour	Not applicable
Odour / Taste	None

9) Stability and reactivity

STABILITY: Stable at room temperature.

CONDITIONS TO AVOID: None known.

HAZARDOUS DECOMPOSITION: None known.

10) Toxicological information

HEALTH WARNINGS:

Skin Contact	Irritant to skin
Eye Contact	Irritating effect
Sensitisation	Unlikely, except under condition of repeated / prolonged exposure.

11) Ecological effects

ENVIRONMENTAL HAZARDS: Not expected to have any adverse effects on the environment.



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12) Disposal Considerations

DISPOSAL OF SUBSTANCE: Disposal should be in compliance with local and / or national legislation. Bury on authorized landfill site or burn in accordance to operative regulations in a waste incinerator.

DISPOSAL OF PACKAGING: Dispose as above.

13) Transport Information

GENERAL: Not classified as hazardous for transport.

14) Regulatory Information

EC GUIDELINE MARKINGS: In accordance with EC Directives / Ordinance.

HAZARD DESIGNATION: Xi - Irritant
Contains Portland Cement - See information supplied by manufacturer.

Risk phrases

R36/38	Irritating to eyes and skin.
R41	Risk of serious damage to eyes.

Safety Phrases

S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28	After contact with skin, wash immediately with plenty of soap and water.
S36 S37/39	Wear suitable protective clothing, gloves and eye / face protection

STATUTORY INSTRUMENTS:

Chemical (Hazard Information and Packaging) Regulations.
Control of Substances Hazardous to Health.

APPROVED CODE OF PRACTICE:

Classification and Labelling of Substances and Preparation
Dangerous for Supply.

GUIDANCE NOTES: Occupational Exposure Limited EH40.
Introduction to Local Exhaust Ventilation HS(G)37.
CHIP for everyone HSG(108).

15) Other Information

This information is based on our present knowledge. However this does not constitute a guarantee for any specific product feature and does not establish a legally valid contractual relationship.



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HARDENER

1) Identification of substance:

Product Details - Hardener component of the formulated polyurethane system
 Trade Names - Richco Liquid Vinyl
 Supplier - Richco Ltd - (Tel : 01268 495730)
 Information - Technical Department

2) Hazard Identification

Designation Xn	Harmful
R20	Harmful by inhalation
R36/37/38	Irritating to eyes, respiratory system and skin.
R42	May cause sensitisation by inhalation.

GENERAL NOTES: Product is a respiratory irritant and potential respiratory sensitiser. Repeated inhalation of vapour or aerosol at levels above the occupational exposure limit could cause respiratory sensitisation. The onset of the respiratory symptoms may be delayed for several hours after exposure. A hyper-reactive response to even minimal concentrations of MDI may develop in sensitised persons. Repeated and / or prolonged contact may cause skin sensitisation.

3) First aid measures

GENERAL: Remove soiled clothing immediately. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

AFTER INHALATION: Move victim to fresh air, keep warm and allow to rest. In case of breathing difficulty or distress, seek medical attention.

AFTER SKIN CONTACT: Remove contaminated clothing. Wash immediately with plenty of soap and water. In case of persistent irritation / rash, seek medical attention.

AFTER EYE CONTACT: Rinse immediately with plenty of water. Continue for at least 15 minutes and seek medical attention if soreness or redness persists.

AFTER SWALLOWING: Provided patient is conscious, rinse mouth with water and give plenty of water to drink. Do not induce vomiting. Obtain medical attention.

4) Fire Fighting Measures

EXTINGUISHING MEDIA:

SUITABLE EXTINGUISHING MEDIA: Dry powder, foam, carbon dioxide.

SPECIAL HAZARDS: Combustion products may include carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons and HCN.

PROTECTIVE EQUIPMENT: Self contained breathing apparatus, PVC boots, gloves and protective clothing.

GENERAL: Product reacts slowly with water to produce CO₂ which may rupture closed containers. This reaction accelerates at high temperatures. Do not re-seal contaminated containers.

5) Accidental Release Measures

SPILL CLEAN-UP METHODS:

SAFETY PRECAUTIONS: Avoid skin and eye contact. Wear goggles / visor, impervious gloves and protective clothing. Ensure area is well ventilated or use respiratory protection.

ENVIRONMENTAL PRECAUTIONS: Remove sources of ignition. Do not allow product to reach sewage system or any water course. Prevent seepage into workpits and cellars. Inform respective authorities in case of seepage into water course or sewage system.

CLEAN-UP PROCEDURE: Absorb spillages with sand, earth or any suitable non-combustible absorbent material. Shovel into open top drums for further decontaminant. Remove and dispose of residues. A suitable decontaminant as follows:
 Water - 90%, Concentrated ammonia solution 8%, Liquid detergent 2%.

6) Handling and Storage

USAGE PRECAUTIONS:

HANDLING: Ensure good ventilation. Avoid contact with skin and eyes. Atmospheric concentrations should be minimised and kept as low as practicable below the occupational exposure limit.

STORAGE: Keep containers properly sealed and store indoors in a well ventilated area. Avoid any contact with moisture. Store in a cool location. Avoid copper, copper alloy and galvanised surfaces.

7) Exposure Controls & Personal

HANDLING REQUIREMENTS: Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer causing nitrosamines could be formed. Avoid contact with eyes or skin. Ensure there is sufficient ventilation of the area. Avoid the formation or spread of mists in the air. Avoid direct contact with the substance. Do not eat, drink or smoke.

STORAGE CONDITIONS: Store in cool, well ventilated areas. Keep container tightly closed. Product must be stored at temperatures above 40°F. Do not store in reactive metal containers. Avoid incompatible materials and conditions - see section 10 of SDS. Keep from freezing. Suitable packaging Do not store in reactive metal containers.

8) Exposure controls/personal protection

ENGINEERING MEASURES: Ensure there is sufficient ventilation of the area. Provide readily accessible eye wash stations and safety showers.

RESPIRATORY PROTECTION: Not required under normal conditions in a well-ventilated workplace. Self-contained breathing apparatus must be available in case of emergency.

HAND PROTECTION: Neoprene gloves. PVC gloves. Butyl gloves. Nitrile gloves. Impermeable gloves. The breakthrough time of the selected gloves(s) must be greater than the intended use period.

EYE PROTECTION: Face-shield. Goggles giving complete protection to eyes and eyewash bottle with clean water.



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SKIN PROTECTION: Impermeable protective clothing. Protective clothing with elasticated cuffs and closed neck. Protective clothing, rubber. Rubber boots. Plastic boots.

9) Physical and Chemical Properties

Form	Liquid
Colour	Pale Yellow
Odour	Ammoniacal
Value/range	Unit Method
Boiling point	@ 200 ° C
Flash point	>100° C
Auto ignition temperature	No data
Density	1.07 g/cm ³ 20 ° C
Viscosity	0.99
Water solubility/miscibility	Moderate (1-10%)
pH	alkaline

10) Stability and reactivity

STABILITY: Stable under normal conditions. Materials to avoid Organic Acids (i.e. acetic acid, citric acid etc) Mineral acids. Product slowly corrodes copper, aluminium, zinc and galvanized surfaces. CAUTION ! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Reactive metals (e.g. sodium, calcium, zinc etc) Materials reactive with hydroxyl compounds. Nitrites, nitrosating agents. Oxidizing agents.

HAZARDOUS DECOMPOSITION: In case of fire hazardous decomposition products may be produced such as: Carbon Monoxide - Carbon Dioxide(CO²)-Nitric Acid - Ammonia - Nitrogen Oxides(NO_x)-Nitrogen Oxide can react with water vapors to form corrosive nitric acid. - Aldehydes - Nitrosamine.

11) Toxicological information

EFFECTS OF EXPOSURE: Component has caused allergic sensitization in animals. Severe skin irritation.

ROUTES OF EXPOSURE: Danger of cumulative effects in contact with the skin.

Toxicity ORL RAT LD50 2,951mg/kg
 Ingredient 1 IVN RAT LD50 53mg/kg
 ORL MUS LD50 1360mg/kg
 ORL RAT LD50 1230mg/kg

12) Ecological effects

Bioaccumulative potential Slightly bioaccumulable.

13) Disposal Considerations

WASTE DISPOSAL: Contact supplier if guidance is required.

DISPOSAL OF PACKAGING: Arrange for collection by specialised disposal company

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14) Transport Information

UN Number	2735
Class	8
Packing Group	II
Hazard ID	80
Packing Instructions	812
Marine Pollutant	Yes
EmS	8-05

15) Regulatory Information

HAZARD SYMBOLS: Corrosive Dangerous for the environment

Safety Phrases

S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/ S37 S39	Wear suitable protective clothing, gloves and eye / face protection.
S61	Avoid release to the environment. Refer to special instructions / safety data sheets.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Risk phrases

R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R43	May cause sensitisation by skin contact
R34	Causes burns.
R20/22	Harmful by inhalation and if swallowed.

The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16) Other Information

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17) Component Composition Information

Hazardous Components:

INGREDIENT NAME	CAS No	CONTENTS	HEALTH (class)	RISK (R No)
BENZYL ALCOHOL	100-51-6	<25%	Xn	R20/22
PARATERTIARYBUTYLPHENOL	98-54-4	<20%	XI	R36/37/38
BENZENE-1, 3-DIMETHANAMINE	1477-55-0	<15%	C	R20/22 R35
TRIMETHYLHEXAMETHYLENEDIAMINE	25620-58-0	<10%	C	R22 R34 R43 R52/53