

Material Safety Data Sheet (MSDS) FastCoat Pro PU Primer

<u>Section 1: Identification of the Mixture and of the Company / Undertaking.</u>

1.1 Product identifier.

Product Name: FASTcoat PU Primer

Product Code: P22

1.2 Relevant identified uses of the mixture and uses advised against.

Additive

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company: Liquid Roofing Systems Ltd

Address: Prees Green

City: Shropshire

Telephone: 01948 841 877

Fax: 01948 841 854

E-mail: info@lrs-systems.co.uk

Web: www.lrs-systems.co.uk

1.4 Emergency telephone number: 01948 841 877 (Only available during office hours)

Section 2: Hazards Identification.

2.1 Classification of the mixture.

In accordance with Regulation (EU) No 1272/2008: Eye Irrit. 2: Causes serious eye irritation.

Flam. Liq. 2: Highly flammable liquid and vapour. STOT SE 3: May cause drowsiness or dizziness.



2.2 Label elements.

Labelling in accordance with Regulation (EU) No 1272/2008:

Pictograms:





Signal Word:

Danger

H statements:

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

P statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P370+P378 In case of fire: Use dry powder or dry sand to extinguish

P403+P233 Store in a well-ventilated place. Keep container tightly closed. P403+P235 Store in a well-ventilated place. Keep cool.

Contains:

isopropanol, isopropyl alcohol, propan-2-ol

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.



Section 3: Composition / Information on Ingredients.

3.1 Substances.

Not Applicable.

3.2 Mixtures.

Substances posing a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, assigned a Community exposure limit in the workplace, and classified as PBT/vPvB or included in the Candidate List:

	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
Identifiers			Classification	specific concentration limit
Index No: 603-117- 00-0 CAS No: 67-63-0 EC No: 200-661-7 Registration No: 01- 2119457558-25-XXXX	[1] isopropanol,isopropyl alcohol,propan-2-ol	20 - 100 %	Eye Irrit. 2, H319 - Flam. Liq. 2, H225 - STOT SE 3, H336	-

^(*)The complete text of the H phrases is given in section 16 of this Safety Data Sheet.

Section 4: First Aid Measures.

4.1 Description of first aid measures.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration. Do not administer anything orally. If unconscious, place them in a suitable position and seek medical assistance.

Eye contact.

If wearing contact lenses, remove them. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact.

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners.

Ingestion.

If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

^[1] Substance with a Community workplace exposure limit (see section 8.1).



4.2 Most important symptoms and effects, both acute and delayed.

Irritant Product, repeated or prolonged contact with skin or mucous membranes can cause redness, blisters or dermatitis, inhalation of spray mist or particles in suspension may cause irritation of the respiratory tract, some symptoms may not be immediate. Can cause allergic reactions.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Section 5: Firefighting Measures.

The product is Highly inflammable, it can cause or considerably worsen a fire, the necessary prevention measures should be taken, and risks avoided. In case of fire, the following measures are recommended:

5.1 Extinguishing media. Recommended extinguishing methods.

Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray. Do not use a direct stream of water to extinguish.

5.2 Special hazards arising from the mixture. Special risks.

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.



Section 6: Accidental Release Measures.

6.1 Personal precautions, protective equipment and emergency procedures.

Eliminate possible ignition points and ventilate the area. No smoking. Avoid breathing fumes. For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3 Methods and material for containment and cleaning up.

Pick up the spill with non-combustible absorbent materials (soil, sand, vermiculite, diatomite, etc.). Pour the product and the absorbent in an appropriate container. The contaminated area should be immediately cleaned with an appropriate de- contaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

Section 7: Handling and Storage.

7.1 Precautions for safe handling.

The fumes are heavier than air and can spread across the ground. They can form explosive mixtures with air. Prevent the creation of flammable or explosive fume concentrations in the air; prevent fume concentrations above work exposure limits. The product must only be used in areas where all unprotected flames and other ignition points have been eliminated. Electrical equipment has to be protected according to applicable standards.

The product can be electrostatically charged: always use earth grounds when transferring the product. Operators must use anti- static footwear and clothing, and floors must be conductors.

Keep the container tightly closed and isolated from heat sources, sparks, and fire. Do not use tools that can cause sparks. For personal protection, see section 8. Never use pressure to empty the containers. They are not pressure-resistant containers. In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Keep the product in containers made of a material identical to the original.



7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Observe indications on the label. Store the containers between 5 and 35° C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

Classification and threshold amount of storage in accordance with Annex I to Directive 2012/18/EU (SEVESO III):

		Qualifying quantity (tonnes) for the application of	
Code	Description	Lower-tier requirements	Upper-tier requirements
P5b	FLAMMABLE LIQUIDS	50	200

7.3 Specific end use(s).

Not available.

<u>Section 8: Exposure Controls / Personal Protection.</u>

8.1 Control parameters.

Work exposure limit for:

Nar	me	CAS No.	Country	Limit value	ppm	mg/m³
isop	propanol, isopropyl alcohol, propan-2-	67.62.0	United	Eight hours	400	999
ol		67-63-0	Kingdom [1]	Short term	500	1250

^[1] According Limit Value (IOELV) list in 2nd Indicative Occupational Exposure adobted by Health and Safety Executive.

The product does NOT contain substances with Biological Limit Values. Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Туре	Value
	DNEL (Workers)	Inhalation, Long-term, Systemic effects	500 (mg/m³)
	DNEL (General population)	Inhalation, Long-term, Systemic effects	89 (mg/m³)
isopropanol,isopropyl alcohol,propan-2-ol CAS No: 67-63-0 EC No: 200-661-7	DNEL (Workers)	Dermal, Long-term, Systemic effects	888 (mg/kg bw/day)
EC NO. 200-001-7	DNEL (General population)	Dermal, Long-term, Systemic effects	319 (mg/kg bw/day)
	DNEL (General population)	Oral, Long-term, Systemic effects	26 (mg/kg bw/day)

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

Concentration levels PNEC:



Name	Details	Value
	aqua (freshwater)	140,9 (mg/L)
	aqua (marine water)	140,9 (mg/L)
	aqua (intermittent releases)	140,9 (mg/L)
	sediment (freshwater)	552 (mg/kg
iconrenanel iconrenyl alcohol prepan 2 el		sediment dw)
isopropanol,isopropyl alcohol,propan-2-ol CAS No: 67-63-0	sediment (marine water)	552 (mg/kg
EC No: 200-661-7		sediment dw)
LC NO. 200-001-7	Soil	28 (mg/kg
		soil dw)
	PNEC STP	2251 (mg/L)
	PNEC oral (Hazard for predators)	160 (mg/kg
		food)

PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %				
Uses:	Additive				
Breathing protecti	Breathing protection:				
PPE:	Filter mask for protection against gases and particles.				
Characteristics:	«CE» marking, category III. The mask must have a wide field of vision and an anatomically designed form in order to be sealed and watertight.				
CEN standards:	EN 136, EN 140, EN 405				
Maintenance:	Should not be stored in places exposed to high temperatures and damp environments before use. Special attention should be paid to the state of the inhalation and exhalation valves in the face adaptor. Read carefully the manufacturer's instructions regarding the equipment's use and maintenance. Attach				
Observations:	the necessary filters to the equipment according to the specific nature of the risk (Particles and aerosols: P1-P2-P3, Gases and vapours: A-B-E-K-AX), changing them as advised by the manufacturer.				
Filter Type needed:	A2 , , , , , , , , , , , , , , , , , , ,				
Hand protection:					
PPE: Characteristics:	Protective gloves against chemicals. «CE» marking, category III.				
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420				
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.				
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.				
Material:	PVC (polyvinyl chloride) Breakthrough time (min.): Material thickness (mm):				
Eye protection:	·				
PPE: Characteristics:					
CEN standards:	EN 165, EN 166, EN 167, EN 168				
Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions. Make sure that mobile parts move smoothly.				
Observations:	Face shields should offer a field of vision with a dimension in the central line of, at least, 150 mm vertically once attached to the frame.				
Skin protection:					
PPE:	Anti-static protective clothing.				
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.				
CEN standards:	EN 340, EN 1149-1, EN 1149-2, EN 1149-3, EN 1149-5				



In order to guarantee uniform protection, follow the washing and maintenance instructions provided by Maintenance: the manufacturer. The protective clothing should offer a level of comfort in line with the level of protection provided in Observations: terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use. PPE: Anti-static safety footwear. Characteristics: «CE» marking, category II. EN ISO 13287, EN ISO 20344, EN ISO 20346 CEN standards: The footwear should be checked regularly Maintenance: The level of comfort during use and acceptability are factors that are assessed very differently depending Observations: on the user. Therefore, it is advisable to try on different footwear models and, if possible, different

Section 9: Physical and Chemical Properties.

9.1 Information on basic physical and chemical properties.

Appearance: Transparent liquid with characteristic odour Colour: colourless

Odour: Alcohol

Odour threshold: N.A./N.A. pH: not determined

Melting point: not determined ^oC

Boiling Point: 82 ºC

Flash point: 12 ºC

Evaporation rate: 1,2 (butyl acetate=1)

In flammability (solid, gas): very flammable

Lower Explosive Limit: 2%

Upper Explosive Limit: N.A./N.A.

Vapour pressure: 4,3 kPa a 20°C

Vapour density:>1 (air=1)

Relative density:0,78 g/cm3

Solubility: water and some organic solvents

Lip solubility: not determined

Hydro solubility: soluble

Partition coefficient (n-octanol/water): 0,05

Auto-ignition temperature: N.A./N.A.

Decomposition temperature: N.A./N.A. Viscosity: 3 mPa.s

Explosive properties: vapours may form explosive mixtures



Oxidizing properties: not determined

N.A./N.A.= Not Available/Not Applicable due to the nature of the product

9.2 Other information.

Pour point: not determined Blink: 425°C

Kinematic viscosity: 2,65

N.A./N.A.= Not Available/Not Applicable due to the nature of the product.

Section 10: Stability and Reactivity.

10.1 Reactivity.

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Unstable in contact with:

- Acids.
- Bases.
- Oxidizing agents.

10.3 Possibility of hazardous reactions.

In certain conditions this may cause a polymerization reaction.

10.4 Conditions to avoid.

Avoid the following conditions:

- Heating.
- High temperature.
- Contact with incompatible materials.

10.5 Incompatible materials.

Avoid the following materials:

- Acids.
- Bases.
- Oxidizing agents.



10.6 Hazardous decomposition products.

Depending on conditions of use, can be generated the following products:

- COx (carbon oxides).
- Organic compounds.

Section 11: Toxicological Information.

IRRITANT PREPARATION. Splatters in the eyes can cause irritation.

IRRITANT PREPARATION. The inhalation of spray mist or suspended particulates can irritate the respiratory tract. It can also cause serious respiratory difficulties, central nervous system disorders, and in extreme cases, unconsciousness.

11.1 Information on toxicological effects.

There are no tested data available on the product.

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Splatters in the eyes can cause irritation and reversible damage.

a) acute toxicity;

Not conclusive data for classification.

b) skin corrosion/irritation;

Not conclusive data for classification.

c) serious eye damage/irritation; Product classified:

Eye irritation, Category 2: Causes serious eye irritation.

d) respiratory or skin sensitisation;

Not conclusive data for classification.

e) germ cell mutagenicity;

Not conclusive data for classification.

f) carcinogenicity;

Not conclusive data for classification.

g) reproductive toxicity;

Not conclusive data for classification.



h) STOT-single exposure; Product classified:

Specific target organ toxicity following a single exposure, Category 3:

i) STOT-repeated exposure;

Not conclusive data for classification.

j) aspiration hazard;

Not conclusive data for classification.

Section 12: Ecological Information.

12.1 Toxicity.

No information is available regarding the ecotoxicity of the substances present.

12.2 Persistence and degradability.

No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potencial.

Information about the bioaccumulation of the substances present.

Name	Bioaccumulation			
Name	Log Pow	BCF	NOECs	Level
isopropanol,isopropyl alcohol,propan-2-ol	0,05		_	High
N. CAS: 67-63-0 EC No: 200-661-7	0,03	-	-	High

12.4 Mobility in soil.

No information is available about the mobility in soil.

The product must not be allowed to go into sewers or waterways. Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.



Section13: Disposal Considerations.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

Section 14 Transport Information.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.

Land: Transport by road: ADR, Transport by rail: RID.

Transport documentation: Consignment note and written instructions

Sea: Transport by ship: IMDG. Transport documentation: Bill of lading Air: Transport by plane: ICAO/IATA. Transport document: Airway bill.

14.1 UN number.

UN No: UN1993

14.2 UN proper shipping name.

Description:

ADR: UN 1993, FLAMMABLE LIQUID, N.O.S. (CONTAINS ISOPROPANOL,ISOPROPYL ALCOHOL,PROPAN-2-OL), 3, PG II, (D/E) IMDG: UN 1993, FLAMMABLE LIQUID, N.O.S. (CONTAINS ISOPROPANOL,ISOPROPYL ALCOHOL,PROPAN-2-OL), 3, PG II (12°C)

ICAO: UN 1993, FLAMMABLE LIQUID, N.O.S. (CONTAINS ISOPROPANOL,ISOPROPYL ALCOHOL,PROPAN-2-OL), 3, PG II

14.3 Transport hazard class(es).

Class(es): 3

14.4 Packing group.

Packing group: II

14.5 Environmental hazards.

Marine pollutant: No



14.6 Special precautions for user.

Labels: 3



Hazard number: 33 ADR LQ: 1 L

IMDG LQ: 1 L

ICAO LQ: 1 L

Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR. Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-E,S-E

Proceed in accordance with point 6.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.

The product is not transported in bulk.

Section 15: Regulatory Information.

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Volatile organic compound (VOC)

VOC content (p/p): 99 %

VOC content: 860 g/l

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): P5b

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.



Section 16: Other Information.

Complete text of the H phrases that appear in section 3: H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Classification codes:

Eye Irrit. 2: Eye irritation, Category 2 Flam. Liq. 2: Flammable liquid, Category 2

STOT SE 3: Specific target organ toxicity following a single exposure, Category 3

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly. Abbreviations and acronyms used:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. BCF: Bioconcentration factor.

CEN: European Committee for Standardization.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

EC50: Half maximal effective concentration. PPE: Personal protection equipment.

IATA: International Air Transport Association. ICAO: International Civil Aviation Organization.

IMDG: International Maritime Code for Dangerous Goods. LC50: Lethal concentration, 50%.

LD50: Lethal dose, 50%.

Log Pow: Logarithm of the partition octanol-water. NOEC: No observed effect concentration.

PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.



Key literature references and sources for data:

http://eur-lex.europa.eu/homepage.html

http://echa.europa.eu/

Regulation (EU) 2015/830.

Regulation (EC) No 1907/2006.

Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

Legal Notes

The information, and in particular, the recommendations relating to the application and the end use of FastCoat Pro PU Primer, are given in good faith based on LRS current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with LRS recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no guarantee in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from ant other advice offered. The user of the product must test the product's suitability for the intended application and purpose. LRS reserves the right to change the properties of its products. The proprietary rights of the third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request.