Material Safety Data Sheet (MSDS)

2-Part Humidity Primer Comp A

Section 1: Identification of the mixture and of the Company / Undertaking.

1.1 Product identifier.

Product Name: Humidity Primer Comp A

Product Code: P21

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

Coating

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

Web: lrs-systems.co.uk

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

Section 2: Hazards Identification.

IRRITANT PREPARATION. Splatters in the eyes can cause irritation.

2.1 Classification of the mixture.

In accordance with Regulation (EU) No 1272/2008:

Aquatic Chronic 2: Toxic to aquatic life with long lasting effects. Eye Irrit. 2: Causes serious eye irritation.

Muta. 2: Suspected of causing genetic defects. Skin Irrit. 2: Causes skin irritation.

Skin Sens. 1 : May cause an allergic skin reaction.

2.2 Label elements.

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

Pictograms:

Signal Word:

Warning

H statements:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H341 Suspected of causing genetic defects.

H411 Toxic to aquatic life with long lasting effects.

P statements:

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection. P501 Dispose of contents/container to ...

P302+P352 IF ON SKIN: Wash with plenty of water/...

P308+P313 IF exposed or concerned: Get medical advice/attention.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Contains:

epoxy resin (number average molecular weight ≤ 700), reaction product: bisphenol-A-(epichlorhydrin) [(tolyloxy)methyl] oxirane,cresyl glycidyl ether (Mixture of isomers)

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.

IRRITANT PREPARATION. Splatters in the eyes can cause irritation.

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:

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
			Classification	specific concentration limit
Index No: 603-074-00-8 CAS No: 25068-38-6 EC No: 500-033-5 Registration No: 01-2119456619-26-XXXX	epoxy resin (number average molecular weight ≤ 700),reaction product: bisphenol-A-(epichlorhydrin)	25 - 75 %	Aquatic Chronic 2, H411 - Eye Irrit. 2, H319 - Skin Irrit. 2, H315 - Skin Sens. 1, H317	Eye Irrit. 2, H319: C ≥ 5 % Skin Irrit. 2, H315: C ≥ 5 %
Index No: 603-056-00-X CAS No: 26447-14-3 EC No: 247-711-4	[(tolyloxy)methyl]oxirane,cresyl glycidyl ether (Mixture of isomers)	25 - 50 %	Aquatic Chronic 2, H411 - Muta. 2, H341 - Skin Irrit. 2, H315 - Skin Sens. 1, H317	-

(*) 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.

If wearing contact lenses, remove them. 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.

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

Harmful Product, prolonged exposure due to inhalation may cause anaesthetic effects and the need for immediate medical assistance.

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 does not present any particular risk in case of fire.

The product is NOT classified as flammable, in case of fire the following measures should be taken:

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.

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

6.2 Environmental precautions.

Product Dangerous for the environment, in case of large spills or if the product contaminates lakes, rivers, or sewers, inform the responsible authorities according to local legislation. 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.

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 35º 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**
E2	ENVIRONMENTAL HAZARDS - Hazardous to the Aquatic Environment in Category Chronic 2	200	500

7.1 Specific end use(s).

Section 8: Exposure Controls / Personal Protection.

8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values. The product does NOT contain substances with Biological Limit Values.

Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Type	Value
epoxy resin (number average molecular weight ≤ 700),reaction product: bisphenol-A-(epichlorhydrin) N. CAS: 25068-38-6 N. CE: 500-033-5	DNEL (Workers)	Inhalation, Long-term, Systemic effects	12,25 (mg/m³)

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.

8.1 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:	**Coating**
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.
Observations:	Read carefully the manufacturer's instructions regarding the equipment's use and maintenance. Attach 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:	Protective gloves against chemicals.
Characteristics:	«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.):	> 480	Material thickness (mm):	0,35

Eye protection:	
PPE:	Protective goggles with built-in frame.
Characteristics:	«CE» marking, category II. Eye protector with built-in frame for protection against dust, smoke, fog and vapour.
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.
Observations:	Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.
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
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.
Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in 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.
CEN standards:	EN ISO 13287, EN ISO 20344, EN ISO 20346
Maintenance:	The footwear should be checked regularly
Observations:	The level of comfort during use and acceptability are factors that are assessed very differently depending on the user. Therefore, it is advisable to try on different footwear models and, if possible, different widths.

Section 9: Physical and Chemical Properties.

9.1 Information on basic physical and chemical properties.

Appearance: Liquid with characteristic odour and colour Colour: colourless or slightly yellow

Odour: epoxy resin

Odour threshold. /N.A. pH:n.a.

Melting point: n.d. ºC Boiling Point: --- ºC Flash point: 121 ºC Evaporation rate: n.d.

In flammability (solid, gas): non-flammable Lower Explosive Limit: n.d.

Upper Explosive Limit: N.A./N.A. Vapour pressure: n.d.

Vapour density: n.d.

Relative density:1,11-1,16 g/cm3 Solubility: organic solvents Lip solubility: soluble Hydro solubility: non-soluble

Partition coefficient (n-octanol/water): 3 to 5 (octanol/water) Auto-ignition temperature: N.A./N.A.

Decomposition temperature: N.A./N.A. Viscosity: approx. 800 cP at 25ºC Explosive properties: n.d.

Oxidizing properties: n.d.

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

9.2. Other information.

Volatile organic compound (VOC)

Product Subcategory: Two-pack reactive performance coatings for specific end use such as floors, water-borne

Phase I* (from 01/01/2007): 140 g/l Phase II* (from 01/01/2010): 140 g/l (*) g/l ready to use

VOC content (p/p): 0 % VOC content: 0 g/l Pour point: n.d.

Blink: n.d.

Kinematic viscosity: n.d.

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.

Based on the properties of the epoxy components, and keeping in mind the toxicological data on similar preparations, this preparation can sensitise and irritate the skin, eyes, and respiratory tract.

The low molecular weight epoxy components are irritants to the eyes, mucous membranes, and skin. Repeated contact with the skin can lead to its irritation or sensitisation, possibly with accentuated autosensitisation to other epoxies.

11.1 Information on toxicological effects.

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; Product classified:

Skin irritant, Category 2: Causes skin irritation.

c) serious eye damage/irritation; Product classified:

Eye irritation, Category 2: Causes serious eye irritation.

d) respiratory or skin sensitisation; Product classified:

Skin sensitiser, Category 1: May cause an allergic skin reaction.

e) germ cell mutagenicity; Product classified:

Mutagen, Category 2: Suspected of causing genetic defects.

f) carcinogenicity;

Not conclusive data for classification.

g) reproductive toxicity;

Not conclusive data for classification.

h) STOT-single exposure;

Not conclusive data for classification.

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.

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

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.

Section 13: 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: UN3082

14.2 UN proper shipping name.

Description: UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT ≤ 700),REACTION PRODUCT: BISPHENOL-A-(EPICHLORHYDRIN) / [(TOLYLOXY)METHYL]OXIRANE,CRESYL GLYCIDYL ETHER (MIXTURE OF ISOMERS)), 9, PG III, (E)

14.3 Transport hazard class(es).

Class(es): 9

14.4 Packing group.

Packing group: III

14.5 Environmental hazards.

Marine pollutant: Yes

Dangerous for the environment

14.6 Special precautions for user.

Labels: 9

Hazard number: 90 ADR LQ: 5 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-A,S-F

Proceed in accordance with point 6.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

The product is not transported in bulk.

Section 15: Regulatory Information.

This information is shown on the current Safety Data Sheet for the Preparation.

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.

See annex I of the Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances and the Regulation (EC) No 689/2008 of the European parliament and of the council of 17 June 2008 concerning the export and import of dangerous chemicals and its subsequent updates.

The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): E2

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.

There has been no evaluation a chemical safety assessment of the product.

Section 16: Other Information.

Complete text of the H phrases that appear in section 3:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H341 Suspected of causing genetic defects.

H411 Toxic to aquatic life with long lasting effects.

Classification codes:

Aquatic Chronic 2: Chronic effect to the aquatic environment, Category 2 Eye Irrit. 2 : Eye irritation, Category 2

Muta. 2: Mutagen, Category 2

Skin Irrit. 2: Skin irritant, Category 2 Skin Sens. 1 : Skin sensitiser, Category 1

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

Labelling in accordance with Directive 1999/45/EC:

Symbols:

Xn N

Harmful

Dangerous for the Environment.

R Phrases:

R43 May cause sensitisation by skin contact.

R68 Possible risk of irreversible effects.

R36/38Irritating to eyes and skin.

R51/53Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrases:

S24 Avoid contact with skin.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37 Wear suitable gloves.

S57 Use appropriate container to avoid environmental contamination. S59 Refer to manufacturer/supplier for information on recovery/recycling.

S60 This material and its container must be disposed of as hazardous waste.

S61 Avoid release to the environment. Refer to special instructions/safety data sheets. Other Phrases:

Contains:

epoxy resin (number average molecular weight ≤ 700), reaction product: bisphenol-A-(epichlorhydrin) [(tolyloxy)methyl]oxirane,cresyl glycidyl ether (Mixture of isomers)

Abbreviations and acronyms used:

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

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.

PPE: Personal protection equipment.

IATA: International Air Transport Association.

IMDG: International Maritime Code for Dangerous Goods.

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) No 453/2010. 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) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of

18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) 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.