



1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier	Trade Name: LRS Flexible Primer
1.2 Relevant identified uses of the substance or mixture and uses advised against	Unsuitable for home DIY applications.
1.3 Application of the substance / the preparation	Reaction resin
1.4 Details of the supplier of the safety data sheet	LRS Systems Prees Green, Shropshire, SY13 2BN Tel.: 01948 841 877 Fax: 01948 841 854 e-mail: info@lrs-systems.co.uk
1.5 Further information obtainable from	Environmental department
1.6 Emergency telephone number	01948 841 877

2. Hazards Identification

2.1 Classification of the substance or mixture according to Regulation (EC) No 1272/2008	
Flam. Liq. 2	H225 Highly flammable liquid and vapour.
Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2	H319 Causes serious eye irritation.
Skin Sens. 1	H317 May cause an allergic skin reaction.
STOT SE 3	H335 May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC	
Xi; Irritant R36/37/38	Irritating to eyes, respiratory system and skin
Xi; Sensitising R43	May cause sensitisation by skin contact
F; Highly flammable R11	Highly flammable
Information concerning particular hazards for human and environment	The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
Classification system	The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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	  GHS02 GHS07
Signal Word	Danger
Hazard-determining components of labelling	n-butyl acrylate and methyl methacrylate
Hazard Statements	H225 Highly flammable liquid and vapour H315 Causes skin irritation H319 Causes serious eye irritation H317 May cause an allergic skin reaction H335 May cause respiratory irritation
Precautionary Statements	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

	sources. No smoking.
	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
	P280 - Wear protective gloves/protective clothing/eye protection/face protection.
	P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
	P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other Hazards
Results of PBT and vPvB Assessment

PBT	N/A
vPvB	N/A

3. Composition Information on Ingredients
3.2 Chemical Characterisation: Mixtures

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

CAS: 141-32-2 EINECS: 205-480-7 Reg.nr.: 01-2119453155-43-xxxx	n-butylacrylate Xi R36/37/38; Xi R43 R10 Flam. Liq. 3, H226; skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	25-50%
CAS: 80-62-6 EINECS: 201-297-1 Reg.nr.: 01-2119452498-28	methyl methacrylate Xi R37/38; Xi R43; F R11 Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	10-25%
CAS: 38668-48-3 EINECS: 254-075-1	1,1'-(p-tolylimino)dipropan-2-ol T R25 R52/53 Acute Tox. 3, H301; Aquatic Chronic 3, H412	0.5-2.5%

Additional Information

For the wording of the listed risk phrases refer to section 16

4. First Aid Measures

4.1 Description of First Aid Measures	
General Information	Immediately remove any clothing soiled by the product.
After Inhalation	Supply fresh air and to be sure call for a doctor.
After Skin Contact	Immediately wash with water and soap and rinse thoroughly.
After Eye Contact	Rinse opened eye for several minutes under running water. Then consult a doctor.
After Swallowing	Drink plenty of water and provide fresh air. Call for a doctor immediately.

4.2 Most Important Symptoms and Effects, Bot Acute and Delayed	
	No further relevant information available.

5. Firefighting Measures

5.1 Extinguishing Media	
Suitable Extinguishing Agents	Foam Sand
	CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For Safety Reasons Unsuitable Extinguishing Agents	Water with full jet

5.2 Special Hazards Arising from the Substance or Mixture	
	Exothermic polymerisation
In Case of Fire the Following can be Released	Hydrocarbons Carbon monoxide and carbon dioxide Nitrogen oxides (NOx)

5.3 Advice for Firefighters	
Protective Equipment	Wear self-contained respiratory protective device.
Additional Information	Cool endangered receptacles with water spray.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures	
	Ensure adequate ventilation.
	Wear protective clothing.
	Keep away from ignition sources.
	Use respiratory protective device against the effects of fumes/dust/aerosol.

6.2 Environmental precautions	Do not allow to enter sewers/ surface or ground water.
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6.3 Methods and material for containment and cleaning up

	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
	Ensure adequate ventilation.
	Do not flush with water or aqueous cleansing agents

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.

7. Handling and Storage**7.1 Precautions for Safe Handling**

	Ensure good ventilation/exhaustion at the workplace.
Information about fire and explosion protection	Keep ignition sources away - Do not smoke. Protect against electrostatic charges.
	Fumes can combine with air to form an explosive mixture.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles	Store only in the original receptacle.
	Store in cool, dry conditions in well sealed receptacles.
	Do not allow to enter sewers/ surface or ground water.
Information about storage in one common storage facility	Not required
Further information about storage conditions	Store receptacle in a well ventilated area. Protect from heat and direct sunlight.
Maximum storage temperature	25°C

7.3 Specific end use(s)

	No further relevant information available.
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8. Exposure Controls/Personal Protection**Additional information about design of technical facilities**

No further data; see item 7

8.1 Control Parameters**Ingredients with limit values that require monitoring at the workplace****141-32-2 n-butyl acrylate**

WEL

Short-term value: 26 mg/m³, 5 ppm
Long-term value: 5 mg/m³, 1 ppm**80-62-6 methyl methacrylate**

WEL	Short-term value: 416 mg/m ³ , 100 ppm Long-term value: 208 mg/m ³ , 50 ppm
Additional Information	The lists valid during the making were used as basis

8.2 Exposure Controls	
General Protective and Hygienic Measures	Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
Respiratory protection	Use the indicated respiratory protection if workplace exposure limits are exceeded.
Recommended filter device for short term use	Filter A
Protection of hands	Protective gloves - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation (EN 374)
Material of gloves	Butyl rubber, BR
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. For the mixture mentioned below the penetration time has to be at least 60 minutes (Permeation according to EN 374 Part 3: Level 3).
Eye protection	Tightly sealed goggles
Body protection	Protective work clothing

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties	
Appearance	Form: Fluid Colour: Whitish
Odour	Characteristic
Odour Threshold	Not determined
pH value	Not determined
Melting point/Melting range	Undetermined
Boiling point/Boiling range	100°C
Flash point	10°C
Flammability (solid, gaseous)	N/A
Ignition temperature	245°C
Decomposition temperature	Not determined
Self-igniting	Product is not selfigniting.
Danger of explosion	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Lower explosion limit	1.2 Vol%
Upper explosion limit	12.5 Vol%
Vapour pressure at 20°C	38.7 hPa
Density at 20°C	0.99 g/cm ³
Relative density	Not determined
Vapour density	Not determined
Evaporation rate	Not determined

Solubility in/Miscibility with water	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water)	Not determined
Viscosity – Dynamic at 20°C	800 mPas
Viscosity – Kinematic	Not determined
Organic solvent content	0.0%

9.2 Other information	No further relevant information available.
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10. Stability and Reactivity

10.1 Reactivity	No further relevant information available.
10.2 Chemical stability - Thermal decomposition / conditions to be avoided	Keep away from heat and direct sunlight. No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions	Exothermic polymerisation
10.4 Conditions to avoid	No further relevant information available
10.5 Incompatible materials	Reacts with peroxides and other radical forming substances
10.6 Hazardous decomposition products	Hydrocarbons Carbon monoxide and carbon dioxide
Additional information	Do not allow to enter sewers/ surface or ground water.

11. Toxicological Information

Acute toxicity	
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)	
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	May cause respiratory irritation.
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.

12. Ecological Information

12.1 Toxicity – Aquatic toxicity	No further relevant information 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.
Additional ecological information	
General notes	Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
12.5 Results of PBT and vPvB assessment	
PBT	N/A
vPvB	N/A
12.6 Other Adverse effects	No further relevant information available.


13. Disposal Considerations

13.1 Waste treatment methods	
Recommendation	Must not be disposed together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

European waste catalogue	
07 02 08*	other still bottoms and reaction residues
15 01 10*	metallic packaging

Uncleaned packaging	
Recommendation	Packaging may be reused or recycled after cleaning. Packaging that may not be cleansed are to be disposed of in the same manner as the product. Disposal must be made according to official regulations.
Recommended cleansing agents	Acetone, ethylacetate

14. Transport Information

14.1 UN Number (ADR, IMDG, IATA)	UN1866
14.2 UN proper shipping name	
ADR	1866 RESIN SOLUTION
IMDG, IATA	RESIN SOLUTION
14.3 Transport hazard classes (ADR, IMDG, IATA)	
Class	3 Flammable liquids.
Label	3
14.4 Packing Group (ADR, IMDG, IATA)	II
14.5 Environmental hazards - Marine pollutant	No
14.6 Special precautions for user	Warning: Flammable liquids.
Danger code (Kemler)	33
EMS Number	F-E, S-E
14.7 Transport in bulk according to Ann of Marpol and the IBC Code	N/A

Transport/Additional Information	
ADR	
Limited Quantities (LQ)	%L
Excepted Quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
Transport category	2
Tunnel restriction code	D/E
IMDG	
Limited Quantities (LQ)	5L
Excepted Quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation"	UN1866, RESIN SOLUTION, 3, II

15. Regulatory Information

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

National Regulations

Technical Instructions (air)

Class	I NK
Share in %	≤2,5 10-25

Waterhazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

15.2 Chemical Safety assessment

A Chemical Safety Assessment has not been carried out.

16. Other Information

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

Relevant Phrases

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.
R10	Flammable.
R11	Highly flammable.
R25	Toxic if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.
R37/38	Irritating to respiratory system and skin.



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R43	May cause sensitisation by skin contact.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Department issuing MSDS	Environmental Department
Abbreviations and Acronyms	Flam. Liq. 2: Flammable liquids, Hazard Category 2 Flam. Liq. 3: Flammable liquids, Hazard Category 3 Acute Tox. 3: Acute toxicity, Hazard Category 3 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3
* Data compared to previous version altered	