



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

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

**2. Hazards Identification**

<b>2.1 Classification of the substance or mixture according to Regulation (EC) No 1272/2008</b>	
<b>Flam. Liq. 2</b>	H225 Highly flammable liquid and vapour.
<b>Skin Irrit. 2</b>	H315 Causes skin irritation.
<b>Skin Sens. 1</b>	H317 May cause an allergic skin reaction.
<b>STOT SE 3</b>	H335 May cause respiratory irritation.
<b>Classification according to Directive 67/548/EEC or Directive 1999/45/EC</b>	
<b>Xn; Harmful</b>	R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
<b>Xi; Irritant</b>	R37/38 Irritating to respiratory system and skin.
<b>Xi; Sensitising</b>	R43 May cause sensitisation by skin contact.
<b>F; Highly flammable</b>	R11 Highly flammable. R33 Danger of cumulative effects.
<b>Information concerning particular hazards for human and environment</b>	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.
<b>Classification system</b>	The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

<b>2.2 Label elements</b>	
<b>Labelling according to Regulation (EC) No 1272/2008</b>	The product is classified and labelled according to the CLP regulation.
<b>Hazard pictograms</b>	  GHS02    GHS07
<b>Signal Word</b>	Danger
<b>Hazard-determining components of labelling</b>	Methyl methacrylate
<b>Hazard statements</b>	<ul style="list-style-type: none"> <li>• H225 Highly flammable liquid and vapour.</li> <li>• H315 Causes skin irritation.</li> <li>• H317 May cause an allergic skin reaction.</li> <li>• H335 May cause respiratory irritation.</li> </ul>
<b>Precautionary statements</b>	<ul style="list-style-type: none"> <li>• P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> </ul>

	<ul style="list-style-type: none"> <li>• P261 Avoid breathing dust/fume/gas/mist/vapours/spray.</li> <li>• P280 Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>• P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</li> <li>• P403+P233 Store in a well-ventilated place. Keep container tightly closed.</li> <li>• P501 Dispose of contents/container in accordance with local/regional/national/international regulations.</li> </ul>
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**2.3 Other Hazards**
**Results of PBT and vPvB assessment**

<b>PBT</b>	N/A
<b>vPvB</b>	N/A

**3. Composition/Information on Ingredients**
**3.2 Chemical characterisation – Mixtures**

<b>Description</b>	Mixture of substances listed below with non-hazardous additions.
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**Dangerous components**

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	50-100%
CAS: 99-97-8 EINECS: 202-805-4 Reg.nr.: 02-2119716664-36-XXXX	N,N-dimethyl-p-toluidine T R23/24/25 R33-52/53  Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; STOT RE 2, H373; Aquatic Chronic 3, H412	0.5-2.5%

<b>Additional information</b>	For the wording of the listed risk phrases refer to section 16.
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**4. Example**
**4.1 Description of first aid measures**

<b>General information</b>	Immediately remove any clothing soiled by the product.
<b>After inhalation</b>	Supply fresh air and to be sure call for a doctor.
<b>After skin contact</b>	Immediately wash with water and soap and rinse thoroughly.



Revised on: 10/08/2015

<b>After eye contact</b>	Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
<b>After swallowing</b>	Drink plenty of water and provide fresh air. Call for a doctor immediately.

<b>4.2 Most important symptoms and effects, both acute and delayed</b>	No further relevant information available.
<b>4.3 Indication of any immediate medical attention and special treatment needed</b>	No further relevant information available.

## **5. Firefighting Measures**

<b>5.1 Extinguishing media</b>	
<b>Suitable extinguishing agents</b>	Foam Sand CO <sub>2</sub> , powder or water spray. Fight larger fire with alcohol resistant foam.
<b>For safety reasons; Unsuitable extinguishing agents</b>	Water with full jet

<b>5.2 Special hazards arising from the substance or mixture</b>	
<b>In case of fire, the following can be released</b>	Exothermic polymerisation. Hydrocarbons Carbon monoxide and carbon dioxide

<b>5.3 Advice for Firefighters</b>	
<b>Protective equipment</b>	Wear self-contained respiratory protective device.
<b>Additional information</b>	Cool endangered receptacles with water spray.

## **6. Accidental release measures**

<b>6.1 Personal precautions, protective equipment and emergency procedures</b>	Ensure adequate ventilation Wear protective clothing. Keep away from ignition sources. Use respiratory protective device against the effects of fumes/dust/aerosol.
<b>6.2 Environmental precautions</b>	Do not allow to enter sewers/ surface or ground water.
<b>6.3 Methods and material for containment and cleaning up</b>	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents
<b>6.4 Reference to other sections</b>	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**

<b>7.1 Precautions for safe handling</b>	Ensure good ventilation/exhaustion at the workplace.
<b>Information about fire and explosion protection</b>	Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Fumes can combine with air to form an explosive mixture.

<b>7.2 Conditions for safe storage, including any incompatibilities storage</b>	
<b>Requirements to be met by storerooms and receptacles</b>	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.
<b>Information about storage in one common storage facility</b>	Not required.
<b>Further information about storage conditions</b>	Store receptacle in a well ventilated area. Protect from heat and direct sunlight.
<b>Maximum storage temperature</b>	25°C

<b>7.3 Specific end use(s)</b>	No further relevant information available.
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**8. Exposure Controls/Personal Protection**

<b>Additional information about design of technical facilities</b>	No further data; see item 7.
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<b>8.1 Control Parameters</b>	
<b>Ingredients with limit values that require monitoring at the workplace</b>	
<b>80-62-6 methyl methacrylate</b>	
WEL	Short-term value: 416 mg/m <sup>3</sup> , 100 ppm Long-term value: 208 mg/m <sup>3</sup> , 50 ppm

<b>DNELs</b>		
<b>80-62-6 methyl methacrylate</b>		
Dermal	DNEL Dermal	13.67 mg/kg/d (-)
Inhalative	DNEL Inhalation	210 mg/m <sup>3</sup> (-)
<b>Additional Information</b>	The lists valid during the making were used as basis.	

<b>8.2 Exposure Controls</b>	
<b>Personal protective equipment</b>	
<b>General protective and hygienic measures</b>	Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols.

	Avoid contact with the skin. Avoid contact with the eyes and skin.
<b>Respiratory protection</b>	Use the indicated respiratory protection if workplace exposure limits are exceeded.
<b>Recommended filter device for short term use</b>	Filter A
<b>Protection of hands</b>	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)
<b>Material of gloves</b>	Butyl rubber, BR
<b>Penetration time of glove material</b>	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).
<b>Eye protection</b>	Tightly sealed goggles

## 9. Physical and Chemical Properties

<b>9.1 Information on basic physical and chemical properties</b>	
<b>Form</b>	Fluid
<b>Colour</b>	Colourless
<b>Odour</b>	Characteristic
<b>Odour threshold</b>	Not determined.
<b>pH value</b>	Not determined.
<b>Melting point/Melting range</b>	Undetermined
<b>Boiling point/Boiling range</b>	100 °C
<b>Flash point</b>	10 °C
<b>Flammability (solid, gaseous)</b>	N/A
<b>Ignition temperature</b>	430 °C
<b>Decomposition temperature</b>	Not determined.
<b>Self-igniting</b>	Product is not selfigniting.
<b>Danger of explosion</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
<b>Upper explosion limit</b>	12.5 Vol%
<b>Lower explosion limit</b>	2.1 Vol%
<b>Vapour pressure at 20°C</b>	38.7 hPa
<b>Density at 20 °C</b>	0.99 g/cm <sup>3</sup>
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Evaporation rate</b>	Not determined.
<b>Solubility in / Miscibility with water</b>	Not miscible or difficult to mix.
<b>Partition coefficient (n-octanol/water)</b>	Not determined.
<b>Dynamic Viscosity at 20°C</b>	70 mPas
<b>Kinematic Viscosity</b>	Not determined.
<b>Organic solvent content</b>	0.0%

<b>9.2 Other information</b>	No further relevant information available.
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**10. Stability and Reactivity**

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

**11. Toxicological Information**

<b>11.1 Information on toxicological effects - Acute toxicity</b>		
<b>LD/LC50 values relevant for classification</b>		
<b>80-62-6 methyl methacrylate</b>		
Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	> 5000 mg/kg (kan)
Inhalative	LC50 (4h)	29.8 mg/l (rat)
<b>99-97-8 N,N-dimethyl-p-toluidine</b>		
Oral	LC50	1650 mg/l (rat)
Dermal	LD50	>2000 mg/kg (rat)
Inhalative	LC50 (4h)	1.5 mg/l (rat)

<b>Primary irritant effect</b>	
<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/irritation</b>	Based on available data, the classification criteria are not met.
<b>Respiratory or skin sensitisation</b>	May cause an allergic skin reaction.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>STOT-single exposure</b>	May cause respiratory irritation.
<b>STOT-repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.

**12. Ecological Information**

<b>12.1 Toxicity</b>
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<b>Aquatic toxicity</b>	
<b>80-62-6 methyl methacrylate</b>	
EC0	100 mg/l (Pseudomonas putida)
EC3 (16h)	100 mg/l (Scenedesmus subspicatus od. quadricauda)
EC50 (48h)	69 mg/l (Daphnia magna)
EC50 (96h)	170 mg/l (Selenastrum capricornutum)
LC50 (96h)	> 79 mg/l (fish)
NOEC	37 mg/l (Daphnia magna)
<b>99-97-8 N,N-dimethyl-p-toluidine</b>	
LC0 (96h)	100 mg/l (fish)

<b>12.2 Persistence and degradability</b>	No further relevant information available.
<b>12.3 Bioaccumulative potential</b>	No further relevant information available.
<b>12.4 Mobility in soil</b>	No further relevant information available.
<b>Additional ecological information</b>	
<b>General notes</b>	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.

<b>12.5 Results of PBT and vPvB assessment</b>	
<b>PBT</b>	Not applicable.
<b>vPvB</b>	Not applicable.

<b>12.6 Other adverse effects</b>	No further relevant information available.
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### **13. Disposal Considerations**


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

<b>European waste catalogue</b>	
07 02 08*	other still bottoms and reaction residues
15 01 10*	packaging containing residues of or contaminated by dangerous substances

<b>Uncleaned packaging</b>	
<b>Recommendation</b>	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.
<b>Recommended cleansing agents</b>	Acetone, ethylacetate

**14. Transport Information**

<b>14.1 UN-Number (ADR, IMDG, IATA)</b>	UN1866
<b>14.2 UN proper shipping name</b>	
<b>ADR</b>	1866 RESIN SOLUTION
<b>IMDG, IATA</b>	RESIN SOLUTION

<b>14.3 Transport hazard class(es) (ADR, IMDG, IATA)</b>	
<b>Class</b>	3 Flammable liquids.
<b>Label</b>	3
<b>14.4 Packing group (ADR, IMDG, IATA)</b>	II
<b>14.5 Environmental hazards - Marine pollutant</b>	No
<b>14.6 Special precautions for user</b>	Warning: Flammable liquids.
<b>Danger code (Kemler)</b>	33
<b>EMS Number</b>	F-E, <u>S</u> -E
<b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	N/A

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

**15. Regulatory information**

<b>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</b>
<b>National regulations</b>

**Technical instructions (air)**

<b>Class</b>	II
<b>Share in %</b>	50-100





Revised on: 10/08/2015

<b>Waterhazard class</b>	Water hazard class 1 (Self-assessment): slightly hazardous for water.
<b>15.2 Chemical safety assessment</b>	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**

<b>H225</b>	Highly flammable liquid and vapour.
<b>H301</b>	Toxic if swallowed.
<b>H311</b>	Toxic in contact with skin.
<b>H315</b>	Causes skin irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H331</b>	Toxic if inhaled.
<b>H335</b>	May cause respiratory irritation.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>R11</b>	Highly flammable.
<b>R23/24/25</b>	Toxic by inhalation, in contact with skin and if swallowed.
<b>R33</b>	Danger of cumulative effects.
<b>R37/38</b>	Irritating to respiratory system and skin.
<b>R43</b>	May cause sensitisation by skin contact.
<b>R52/53</b>	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

<b>Department issuing MSDS</b>	Environmental Department
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<b>Abbreviations and acronyms</b>	<ul style="list-style-type: none"> <li>• Flam. Liq. 2: Flammable liquids, Hazard Category 2</li> <li>• Acute Tox. 3: Acute toxicity, Hazard Category 3</li> <li>• Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2</li> <li>• Skin Sens. 1: Sensitisation - Skin, Hazard Category 1</li> <li>• STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3</li> <li>• STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2</li> <li>• Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3</li> </ul>
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<b>* Data compared to the previous version altered.</b>	
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