





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

1.1 Product Identifier	Trade Name: LRS Catalyst
1.2 Relevant identified uses of the substance or mixture and uses advised against	No further relevant information available.
1.3 Application of the substance / the preparation	Catalyst
1.4 Details of the supplier of the safety data sheet	Liquid Rubber Sales Ltd, Prees Green, Whitchurch, Shropshire SY13 4QL 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	
Org. Perox. CD	H242 Heating may cause a fire.
Eye Irrit. 2	H319 Causes serious eye irritation.
Skin Sens. 1	H317 May cause an allergic skin reaction.
Repr. 2	H361 Suspected of damaging fertility or the unborn child.
Aquatic Acute 1	H400 Very toxic to aquatic life.
Aquatic Chronic 3	H412 Harmful to aquatic life with long lasting effects.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC	
Xn; Harmful R62	Possible risk of impaired fertility.
Xi; Irritant R36	Irritating to eyes.
Xi; Sensitising R43	May cause sensitisation by skin contact.
O; Oxidising R7	May cause fire.
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   GHS08 GHS09
Signal Word	Danger

Hazard-determining components of labelling	dicyclohexyl phthalate and dibenzoyl peroxide
Hazard Statements	H242 Heating may cause a fire. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H361 Suspected of damaging fertility or the unborn child. H400 Very toxic to aquatic life. H412 Harmful to aquatic life with long lasting effects.
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. P410 Protect from sunlight 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: 94-36-0 EINECS: 202-327-6 Reg.nr.: 01-2119511472-50-XXXX	Dibenzoyl peroxide Xi R36; Xi R43; E R3; O R7 Org. Perox. B, H241; Aquatic Acute 1, H400; Eye Irrit. 2, H319; Skin Sens. 1, H317	25-50%
CAS: 84-61-7 EINECS: 201-545-9 Reg.nr.: 02-2119757232-42-XXXX	dicyclohexyl phthalate Xn R62; Xi R43 R53 Repr. Cat. 2 Repr. 2, H361; Skin Sens. 1, H317; Aquatic Chronic 3, H412	25-50%

Additional Information	For the wording of the listed risk phrases refer to section 16
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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.

4.3 Indication of any immediate medical attention and special treatment needed	
	No further relevant information available.

5. Firefighting Measures

5.1 Extinguishing Media	
Suitable Extinguishing Agents	Foam Sand CO ₂ , 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	
In Case of Fire the Following can be Released	Hydrocarbons Carbon monoxide and carbon dioxide

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.



Revised on: 20/08/2015

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	
	Pick up mechanically.
	Dispose contaminated material as waste according to item 13.
	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.
	Prevent formation of dust.
Information about fire and explosion protection	Keep ignition sources away - Do not smoke.
	Use explosion-proof apparatus / fittings and spark-proof tools.

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	Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.
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.

8. Exposure Controls/Personal Protection

Additional information about design of technical facilities	No further data; see item 7
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8.1 Control Parameters
Ingredients with limit values that require monitoring at the workplace
94-36-0 dibenzoyl peroxide

WEL	Long-term value: 5 mg/m ³
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84-61-7 dicyclohexyl phthalate

WEL	Long-term value: 5 mg/m ³
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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

Suitable respiratory protective device recommended.

Recommended filter device for short term use

Filter P2

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

Nitrile rubber, NBR
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

Weak, Characteristic

Odour Threshold

Not determined

pH value

Not applicable

Boiling point/Boiling range

400°C

Flash point

180°C

Flammability (solid, gaseous)

May cause fire.

Ignition temperature
Decomposition temperature

60°C

Self-igniting

Product is not selfigniting.

Danger of explosion

Not determined

Lower explosion limit

Not determined

Upper explosion limit

Not determined

Vapour pressure at 20°C

1 hPa

Density at 20°C

1.24 g/cm³

Bulk density	0.56 g/cm ³
Relative density	Not determined
Vapour density	Not applicable
Evaporation rate	Not applicable
Solubility in/Miscibility with water	Insoluble
Partition coefficient (n-octanol/water)	Not determined
Viscosity – Dynamic	Not applicable
Viscosity – Kinematic	Not applicable
Organic solvent content	0.0%
Solids content	100.0 %

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	To avoid thermal decomposition do not overheat. Keep away from heat and direct sunlight. No decomposition if used according to specifications.
Decomposition starts at	60°C
10.3 Possibility of hazardous reactions	Visible decomposition with spontaneous ignition on heating.
10.4 Conditions to avoid	No further relevant information available
10.5 Incompatible materials	Do not store together with reducing agents, heavy-metal compounds, acids and alkalis. Reacts with alkali, amines and strong acids.
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	
LD/LC50 values relevant for classification	
94-36-0 dibenzoyl peroxide	
Oral Inhalative	LD50 >5000 mg/kg (rat) LC50 (4h) >24.3 mg/l (rat)
84-61-7 dicyclohexyl phthalate	
Oral	LD50 30000 mg/kg (rat)
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
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	Suspected of damaging fertility or the unborn child.
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	
94-36-0 dibenzoyl peroxide	LC50 (96h) 2 mg/l (fish)
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. The material is harmful to the environment.
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	
16 09 03*	peroxides, for example hydrogen peroxide
15 01 02	plastic 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.

14. Transport Information

14.1 UN Number (ADR, IMDG, IATA)	UN3106
14.2 UN proper shipping name	
ADR	3106 ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide), ENVIRONMENTALLY HAZARDOUS
IMDG	ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide), MARINE POLLUTANT

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IATA	ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide)
14.3 Transport hazard classes ADR, IMDG	 
Class	5.2 Organic peroxides
Label	5.2
IATA	
Class	5.2 Organic peroxides
Label	5.2
14.4 Packing Group (ADR, IMDG, IATA)	Void
14.5 Environmental hazards - Marine pollutant	Yes 
Special marking (ADR)	Symbol: 
14.6 Special precautions for user	Warning: Organic peroxides.
Danger code (Kemler)	-
EMS Number	F-J, S-R
14.7 Transport in bulk according to Ann of Marpol and the IBC Code	Not applicable.

Transport/Additional Information	
ADR	
Limited Quantities (LQ)	500g
Excepted Quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
Transport category	2
Tunnel restriction code	D
IMDG	
Limited Quantities (LQ)	500g
Excepted Quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
UN "Model Regulation"	UN3106, ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide), ENVIRONMENTALLY HAZARDOUS, 5.2

15. Regulatory Information

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

National Regulations

Technical Instructions (air)

Class	II
Share in %	25-50%

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

H241	Heating may cause a fire or explosion.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.
R3	Extreme risk of explosion by shock, friction, fire or other sources of ignition.
R36	Irritating to eyes.
R43	May cause sensitisation by skin contact.
R53	May cause long-term adverse effects in the aquatic environment.
R62	Possible risk of impaired fertility.
R7	May cause fire.

Department issuing MSDS	Environmental Department
Abbreviations and Acronyms	Org. Perox. B: Organic Peroxides, Type B Org. Perox. CD: Organic Peroxides, Types C, D Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Repr. 2: Reproductive toxicity, Hazard Category 2 Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1 Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3
* Data compared to previous version altered	