



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.01.2021

Vers.No.: 8

Revision: PJ0822RR

### SECTION 1: Identification of the substance/mixture and of the company/ undertaking

- **1.1 Product identifier**
- **Trade name: LRS Catalyst**
- **Article number: I154 BPO**
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- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
Unsuitable for home DIY applications.
- **Application of the substance / the preparation: Catalyst**
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
LRS  
Prees Green  
SY13 2BN  
Tel.: 01948841877  
e-mail: [info@lrs-systems.co.uk](mailto:info@lrs-systems.co.uk)
- **Further information obtainable from: Environmental Department**
- **1.4 Emergency telephone number:**  
07983631893 or contact NHS 111/a doctor

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
- Org. Perox. D      H242 Heating may cause a fire.
- Eye Irrit. 2      H319 Causes serious eye irritation.
- Skin Sens. 1      H317 May cause an allergic skin reaction.
- Aquatic Acute 1      H400 Very toxic to aquatic life.
- Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

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- **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**
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- 
- GHS02   GHS07   GHS09
- 
- **Signal word** Danger
- **Hazard-determining components of labelling:**
- dibenzoyl peroxide
- **Hazard statements**
- H242 Heating may cause a fire.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H410 Very toxic 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.
- P234      Keep only in original packaging.

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- P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
 P370+P378 In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.  
 P403+P235 Store in a well-ventilated place. Keep cool.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 94-36-0 EINECS: 202-327-6 Reg.nr.: 01-2119511472-50-XXXX	dibenzoyl peroxide ⚠️ ⚠️ Org. Perox. B, H241; ⚠️ Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10); ⚠️ Eye Irrit. 2, H319; Skin Sens. 1, H317	25-50%
CAS: 94-49-5 EINECS: 202-338-6 Reg.nr.: 01-2120759933-41-XXXX	Ethylenglykoldibenzoat ⚠️ Aquatic Chronic 2, H411	25-50%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 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. If symptoms persist, 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, both 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.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
Foam  
Sand  
CO<sub>2</sub>, 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.

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 - **Additional information** Cool endangered receptacles with water spray.

### SECTION 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.

#### - 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.

### SECTION 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

##### - Storage:

##### - 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.

### SECTION 8: Exposure controls/personal protection

#### - 8.1 Control parameters

 - **Additional information about design of technical facilities:** No further data; see item 7.

#### - Ingredients with limit values that require monitoring at the workplace:

**94-36-0 dibenzoyl peroxide**

 WEL | Long-term value: 5 mg/m<sup>3</sup>

 - **Additional information:** The lists valid during the making were used as basis.

#### - 8.2 Exposure controls

##### - Personal protective equipment:

##### - General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

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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.

- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Protective work clothing

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

##### General Information

##### Appearance:

Form:	Powder
Colour:	White
Odour:	Weak, characteristic
Odour threshold:	Not determined.

pH-value: Not applicable.

##### Change in condition

Initial boiling point and boiling range: 400 °C

Flash point: 180 °C

Flammability (solid, gas): May cause fire.

Decomposition temperature: 60 °C

Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

##### Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

Vapour pressure at 20 °C: 1 hPa

Density at 20 °C: 1.24 g/cm<sup>3</sup>

Bulk density: 0.56 g/cm<sup>3</sup>

Relative density: Not determined.

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- 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.
Kinematic:	Not applicable.
- Solvent content:	
Organic solvents:	0.0 %
Solids content:	100.0 %
- 9.2 Other information	No further relevant information available.

### SECTION 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 and stored 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.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

#### 94-36-0 dibenzoyl peroxide

Oral	LD50	>5,000 mg/kg (rat)
Inhalative	LC50 (4h)	>24.3 mg/l (rat)

- **Primary irritant effect:**
- **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.
- **Additional toxicological information:**
- **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.

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- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **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.

### SECTION 12: Ecological information

#### 12.1 Toxicity

##### Aquatic toxicity:

#### 94-36-0 dibenzoyl peroxide

LC50 (96h)	2 mg/l (fish)
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- **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.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **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.  
Also poisonous for fish and plankton in water bodies.  
The material is harmful to the environment.  
Toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 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.  
Packagings 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.

### SECTION 14: Transport information

#### 14.1 UN-Number

#### ADR, IMDG, IATA

UN3106

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<ul style="list-style-type: none"> <li>- 14.2 UN proper shipping name</li> <li>- ADR</li> <li>- IMDG</li> <li>- IATA</li> </ul>	3106 ORGANIC PEROXIDE TYPE D, SOLID, ENVIRONMENTALLY HAZARDOUS ORGANIC PEROXIDE TYPE D, SOLID, MARINE POLLUTANT ORGANIC PEROXIDE TYPE D, SOLID
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- 14.3 Transport hazard class(es)

- ADR, IMDG



<ul style="list-style-type: none"> <li>- Class</li> <li>- Label</li> </ul>	5.2 Organic peroxides. 5.2
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- IATA



<ul style="list-style-type: none"> <li>- Class</li> <li>- Label</li> </ul>	5.2 Organic peroxides. 5.2
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- 14.4 Packing group

- ADR, IMDG, IATA      Void

- 14.5 Environmental hazards:

<ul style="list-style-type: none"> <li>- Marine pollutant:</li> <li>- Special marking (ADR):</li> </ul>	Yes Symbol (fish and tree) Symbol (fish and tree)
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- 14.6 Special precautions for user

<ul style="list-style-type: none"> <li>- Hazard identification number (Kemler code): -</li> <li>- EMS Number:</li> <li>- Stowage Category</li> <li>- Stowage Code</li> <li>- Segregation Code</li> </ul>	Warning: Organic peroxides. F-J,S-R D SW1 Protected from sources of heat. SG35 Stow "separated from" SGG1-acids SG36 Stow "separated from" SGG18-alkalis.
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- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

- Transport/Additional information:

<ul style="list-style-type: none"> <li>- ADR</li> <li>- Limited quantities (LQ)</li> <li>- Excepted quantities (EQ)</li> <li>- Transport category</li> <li>- Tunnel restriction code</li> </ul>	500 g Code: E0 Not permitted as Excepted Quantity 2 D
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- IMDG

<ul style="list-style-type: none"> <li>- Limited quantities (LQ)</li> <li>- Excepted quantities (EQ)</li> </ul>	500 g Code: E0 Not permitted as Excepted Quantity
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· UN "Model Regulation":	UN 3106 ORGANIC PEROXIDE TYPE D, SOLID, 5.2, ENVIRONMENTALLY HAZARDOUS
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### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category**  
P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES  
E1 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

· <b>DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II</b>
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None of the ingredients is listed.
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- **National regulations:**
- **Technical instructions (air):**

Class	Share in %
II	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.

### SECTION 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.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.
- **Department issuing SDS:** Environmental Department
- **Contact:** Dipl.- Ing. (FH) Kurt K. Engel
- **Abbreviations and acronyms:**  
Org. Perox. B: Organic peroxides – Type B  
Org. Perox. D: Organic peroxides – Type C/D  
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
Skin Sens. 1: Skin sensitisation – Category 1  
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1  
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
- **\* Data compared to the previous version altered.**

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