

Date Printed 14.06.2022

Version number 1

Revision Date 14.06.2022

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

- · 1.1 Product identifier
- Trade name: Catalyst For LR Resin
- · Article number: AGR1281C
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the preparation: Catalyst
- · 1.3 Details of the supplier of the safety data sheet
- · Supplier.

Agar Scientific Ltd Parsonage Lane Stansted CM24 8GF United Kingdom sales@agarscientific.com Tel: +44 (0) 1279 813 519

- · Further information obtainable from: Technical Support
- 1.4 Emergency telephone number: 24 hours: +44 (0)1856 407333

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



exploding bomb

Unst. Expl. H200 Unstable explosives.



health hazard

Repr. 1B H360D May damage the unborn child.



environment

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Org. Perox. D H242 Heating may cause a fire.

· 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









GHS01 GHS07 GHS08

08 GHS09

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· Signal word Danger

· Hazard-determining components of labelling:

dicyclohexyl phthalate dibenzoyl peroxide

Hazard statements

H200 Unstable explosives.

H242 Heating may cause a fire. H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H360D May damage the unborn child.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

Keep out of reach of children. P102

Read carefully and follow all instructions. P103

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P373 DO NOT fight fire when fire reaches explosives.

P380 Evacuate area.

P401 Store in accordance with local/regional/national/international regulations.

Store locked up. P405 Protect from sunlight. P410

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: 84-61-7	dicyclohexyl phthalate	50-70%
EINECS: 201-545-9	♦ Repr. 1B, H360D; ♦ Skin Sens. 1, H317	
CAS: 94-36-0	dibenzoyl peroxide	50-70%
EINECS: 202-327-6	Org. Perox. B, H241; Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317	
· SVHC		
84-61-7 dicyclohexyl phthalate		

· 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.

No adverse effects are anticipated from inhalation.

- · After skin contact: Wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye under running water. If symptoms persist, consult a doctor.
- · After swallowing: If symptoms persist consult doctor.
- · 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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· 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: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture

No further relevant information available.

- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Remove persons from danger area.

Wear protective gloves and glasses.

6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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.

Open and handle receptacle with care.

Information about fire - and explosion protection:

The dried resin is combustible, similar to wood. Burning dry resin emits dense, black smoke. As latex, material is not combustible.

Protect against electrostatic charges.

Prevent impact and friction.

Extinguishing media: Water fog - dried resin only.

- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

Protect from heat and direct sunlight.

· 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.

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Ingredients with limit values that require monitoring at the workplace:

84-61-7 dicyclohexyl phthalate

WEL Long-term value: 5 mg/m³

94-36-0 dibenzoyl peroxide

WEL Long-term value: 5 mg/m³

· 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.

Remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Solid

Colour: According to product specification

· Odour: Characteristic
· Odour threshold: Not determined.

· **pH-value:** Not applicable.

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 Change in condition Melting point/freezing point: Initial boiling point and boiling range 	54 °C : 400 °C
· Flash point:	180-190 °C
· Flammability (solid, gas):	May cause fire.
· Ignition temperature:	380 °C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Extreme risk of explosion by shock, friction, fire or othe sources of ignition.
· Explosion limits: Lower: Upper:	Not determined. Not determined.
· Vapour pressure at 20 °C:	<1 hPa
Density at 20 °C: Relative density Vapour density Evaporation rate	0.88571-1.736 g/cm³ Not determined. Not applicable. Not applicable.
· Solubility in / Miscibility with water:	Insoluble.
Partition coefficient: n-octanol/water:	Not determined.
· Viscosity: Dynamic: Kinematic:	Not applicable. Not applicable.
· 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:

No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

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 2,000 mg/kg (mouse) Inhalative LC50/4 h 24.3 mg/l (rat)

- Specific symptoms in biological assay:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.

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· Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

- · Additional toxicological information:
- CMR effects (carcinogenity, 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

May damage the unborn child.

- · 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

EC50 2.91 mg/kg (Daphnia magna) ((48h))

ERC50 0.0711 mg/l (green algae)

LC50 0.06 mg/l (Oncorhynchus mykiss (rainbow trout))

- · 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.

Also poisonous for fish and plankton in water bodies.

- 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.

· Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN3104
· 14.2 UN proper shipping name · ADR	3104 ORGANIC PEROXIDE TYPE C, SOLID, ENVIRONMENTALLY HAZARDOUS
· IMDG, IATA	ORGANIC PEROXIDE TYPE C, SOLID

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(Contd. of page 6) · 14.3 Transport hazard class(es) · ADR 5.2 Organic peroxides. · Class · Label ·IMDG · Class 5.2 Organic peroxides. · Label 5.2/1 ·IATA · Class 5.2 Organic peroxides. · Label 5.2 (1) · 14.4 Packing group · ADR, IATA Void ·IMDG Ш · 14.5 Environmental hazards: · Special marking (ADR): Symbol (fish and tree) · 14.6 Special precautions for user Warning: Organic peroxides. · Hazard identification number (Kemler code): -· EMS Number: F-J,S-R · Stowage Category D · Stowage Code SW1 Protected from sources of heat. Segregation Code SG35 Stow "separated from" SGG1-acids SG36 Stow "separated from" SGG18-alkalis. SG72 See 7.2.6.3.2. · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. · Transport/Additional information: · ADR · Limited quantities (LQ) 100 g · Excepted quantities (EQ) Not permitted as Excepted Quantity Transport category 1 · Tunnel restriction code D · UN "Model Regulation": UN 3104 ORGANIC PEROXIDE TYPE C, 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

P1a EXPLOSIVES

E1 Hazardous to the Aquatic Environment

- Qualifying quantity (tonnes) for the application of lower-tier requirements 10 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50 t
- · National regulations:
- Other regulations, limitations and prohibitive regulations
- · Substances of very high concern (SVHC) according to REACH, Article 57

84-61-7 dicyclohexyl phthalate

• 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 and should assist the user with the safe handling of this material when properly applied. 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.

H302 Harmful if swallowed.

May cause an allergic skin reaction. H317

H319 Causes serious eye irritation.

H360D May damage the unborn child.

Department issuing SDS: Sales department

Contact:

sales@agarscientific.com Tel: +44 (0) 1279 813 519

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Unst. Expl.: Explosives - Unstable explosive

Org. Perox. B: Organic peroxides – Type B Org. Perox. D: Organic peroxides – Type C/D

Acute Tox. 4: Acute toxicity - Category 4

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation - Category 1

Repr. 1B: Reproductive toxicity - Category 1B

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

* Data compared to the previous version altered.