

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : Caltech QC Catalyst

Ref: M716FR

Revision Date : 15.01.2016

Version : 5.0 /en

ALUMASC

ROOFING SYSTEMS

Replaces version from : 15.01.2016

Print date : 27.01.2016

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

1.1 Product identifier

Commercial Product Name Caltech QC Catalyst

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses hardener

1.3 Details of the supplier of the safety data sheet

Address Alumasc Exterior Buildings Products Ltd
White House Works, Bold Road
Sutton, St Helens, WA9 4JG
Telephone : +44 (0) 1744 648 400

Responsible Department Technical Department

E-mail (competent person) roofing@alumasc-exteriors.co.uk

1.4 Emergency telephone number

Emergency telephone number +44 (0) 1744 648 400

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

*Classification according to Regulation (EC) No. 1272/2008 Org. Perox. CD; H242 Eye Irrit. 2; H319 Skin Sens. 1; H317 Repr. 2; H361f Aquatic Acute 1; H400 Aquatic Chronic 3; H412

2.2 Label elements

Hazard pictogram



GHS02



GHS07



GHS08



GHS09

Signal word

Danger

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Hazardous component(s) to be indicated on label *dibenzoyl peroxide , Dicyclohexyl phthalate*

*H-statement(s)

H242: Heating may cause a fire.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H361f: Suspected of damaging fertility.
H410: Very toxic to aquatic life with long lasting effects.
H400: Very toxic to aquatic life.
H412: Harmful to aquatic life with long lasting effects.

*P-statement(s)

P201: Obtain special instructions before use.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220: Keep/Store away from clothing/combustible materials.
P234: Keep only in original container.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before reuse.
P337+P313: If eye irritation persists: Get medical advice/attention.
P391: Collect spillage.
P403: Store in a well-ventilated place.
P411: Store at temperatures not exceeding ... °C.
P420: Store away from other materials.

SECTION3:Composition/informationoningredients

3.2 Mixture

Chemical characterization

Benzoylperoxyde, phlegmated with plasticizer

Hazardous ingredients

Ingredient		Classification (EC) 1272/2008	Concentration
<i>dibenzoyl peroxide</i>	CAS No. : 94-36-0 EC-No. : 202-327-6 Index-No. : 617-008-00-0 REACH No. : 01-2119511472-50-XXXX	Org. Perox. B; H241 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Acute 1; H400	45.0 - 50.0 % by weight
<i>Dicyclohexyl phthalate</i>	CAS No. : 84-61-7 EC-No. : 201-545-9 REACH No. : 01-2119978223-34-XXXX	Skin Sens. 1; H317 Repr. 2; H361f Aquatic Chronic 3; H412	45.0 - 50.0 % by weight

SECTION4:Firstaidmeasures

4.1 Description of first aid measures

General advice

If symptoms persist, call a physician.

If inhaled

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

In case of skin contact

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs, seek medical advice/attention.

In case of eye contact

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed

Rinse mouth. Do NOT induce vomiting. Call a physician immediately.

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Carbon dioxide (CO₂), Dry powder, Dry sand, Water spray, Foam

Extinguishing media which must not be used for safety reasons Halons

5.2 Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases Carbon dioxide (CO₂), Carbon monoxide, Benzoic acid, Benzene

5.3 Advice for firefighters

Special protective equipment for firefighting In the event of fire, wear self-contained breathing apparatus.

Additional information on firefighting Cool closed containers exposed to fire with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions Do not breathe dust. Avoid contact with skin and eyes. Use personal protective equipment.

6.2 Environmental precautions

Environmental precautions Do not flush into surface water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

6.5 Additional information

Other information Risk of ignition.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Wear personal protective equipment. Do not breathe dust. Avoid contact with skin and eyes.

7.2 Conditions for safe storage, including any incompatibilities

**Storage specifications* Organic peroxides Type: OP II
Store in original container. Keep container tightly closed in a dry and well-ventilated place.

TRGS 510 5.2

Recommended storage temperature 25 °C

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

DIBENZOYL PEROXIDE

Great Britain

Long-term exposure value/ mg/m ³	Source
5	19

Source : 19 - EH40/2005 Workplace exposure limits (2011)

DNEL

Value	Target group	Exposure route	Exposure frequency	Source
11,75 mg/m ³	Workers	Inhalation	Long term effects	100
6,6 mg/kg	Workers	dermal exposure	Long term effects	100
2,9 mg/m ³	Consumers	Inhalation	Long term effects	100
3,3 mg/kg	Consumers	dermal exposure	Long term effects	100
1,65 mg/kg	Consumers	Oral	Long term effects	100

Source : 100 - Firmendaten

PNEC

Value	Exposure route	Source
0,000602 mg/l	freshwater	100
0,338 mg/kg	freshwater sediment	100
0,000602 mg/l	marine water	100
0,0338 mg/kg	marine sediment	100
0,35 mg/l	Waste water pretreatment	100
6,67 mg/kg	Oral	100

Source : 100 - Firmendaten

Dicyclohexyl phthalate

Great Britain

Long-term exposure value/ mg/m ³	Source
5	19

Source : 19 - EH40/2005 Workplace exposure limits (2011)

DNEL

Value	Target group	Exposure route	Exposure frequency	Source
35,2 mg/m ³	Workers	Inhalation	Long term effects systemic	100
0,5 mg/kg	Workers	dermal exposure	Long term effects systemic	100

Source : 100 - Firmendaten

PNEC

Value	Exposure route	Source
0,00362 mg/l	freshwater	100
1,06 mg/kg	freshwater sediment	100
0,000362 mg/l	marine water	100
01,06 mg/kg	marine sediment	100
10 mg/l	STP	100
0,21	Soil	100

Source : 100 - Firmendaten

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8.2 Exposure controls

Respiratory protection Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).

Remarks : Recommended Filter type: P 1

Hand protection

Suitable material : butyl-rubber Nitriles

Unsuitable material : Leather gloves

Suitable material : butyl-rubber Nitriles

Eye protection Tightly fitting safety goggles

Engineering measures Ensure adequate ventilation, especially in confined areas.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<i>Physical state</i>	<i>solid</i>
<i>Form</i>	<i>powdered form whitish</i>
<i>Odour</i>	<i>characteristic</i>
<i>Odour threshold</i>	<i>not determined</i>
<i>pH</i>	<i>not applicable</i>
<i>Melting point [°C] / Freezing point [°C]</i>	<i>not applicable</i>
<i>Boiling point [°C]</i>	<i>not applicable</i>
<i>Flash point</i>	<i>not applicable</i>
<i>Evaporation rate [kg/(s*m²)]</i>	<i>not applicable</i>
<i>Flammability (solid, gas)</i>	<i>Heating may cause a fire.</i>
<i>Explosion limits [Vol-%]</i>	<i>not determined</i>
<i>Vapour pressure [kPa]</i>	<i>not applicable</i>
<i>Vapour density</i>	<i>not applicable</i>
<i>Density [g/cm³]</i>	<i>1,23 g/cm³</i>
<i>Relative density</i>	<i>not determined</i>
<i>Water solubility [g/l]</i>	<i>not determined</i>
<i>Partition coefficient n-octanol /water (log P O/W)</i>	
<i>Remarks :</i>	<i>not determined</i>
<i>Autoinflammability</i>	<i>not auto-flammable</i>
<i>Decomposition temperature [°C]</i>	<i>60 °C</i>
<i>Viscosity, dynamic [kg/(m*s)]</i>	<i>not applicable</i>
<i>Risk of explosion.</i>	<i>Risk of dust explosion.</i>

9.2 Other information

Bulk density [kg/m³] 650 kg/m³

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SECTION 10: Stability and reactivity

10.1 Reactivity

Thermal decomposition Self-Accelerating decomposition temperature (SADT) 60 °C

10.4 Conditions to avoid

Conditions to avoid Avoid shock and friction. Temperatures above 25°C can influence the product characteristics.

10.5 Incompatible materials

Materials to avoid Rust, Iron, Copper, Acids, Reducing agents

10.6 Hazardous decomposition products

Hazardous decomposition products Benzoic acid, Benzol

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Hazardous ingredients

DIBENZOYL PEROXIDE

Oral toxicity [mg/kg]	Test criterion	Test species	Source
> 5000 mg/kg	LD50	rat	100

Source : 100 - Firmendaten

Inhalative toxicity [mg/l]	Test criterion	Test species	Note	Exposure duration	Source
24,3 mg/l	LC50	rat	OECD Test Guide-line 403	4 hours	100

Source : 100 - Firmendaten

LC50 Inhalation 4h for dusts and sprays [mg/l]	Test criterion	Test species	Source
>24,3	LC0	rat	100

Source : 100 - Firmendaten

Irritant effect on skin	No skin irritation
Measuring method	OECD Test Guideline 404
Test species	rabbit
Irritant effect on eyes	Eye irritation, reversibel innerhalb 21 Tage
Measuring method	OECD Test Guideline 405
Test species	rabbit
Sensitization	Skin sensitization
Measuring method	OECD TG 429
Test species	mouse
Carcinogenic effects	Did not show carcinogenic effects in animal experiments.
Mutagenicity	Did not show mutagenic effects in animal experiments.
Reproduction toxicity	No toxicity to reproduction

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Specific target organ toxicity (single exposure) [mg/kg]	Source
no data available	100

Source : 100 - Firmendaten

Specific target organ toxicity (repeated exposure) [mg/kg]	Source
Animal testing did not show any hazardous effects.	100

Source : 100 - Firmendaten

Dicyclohexyl phthalate

Oral toxicity [mg/kg]	Test criterion	Test species	Source
>2001	LD50	rat	100

Source : 100 - Firmendaten

Irritant effect on skin	No skin irritation
Measuring method	OECD 439 Skin irritation
Irritant effect on eyes	No eye irritation
Measuring method	OECD 437 Eye irritation
Sensitization	Skin sensitization
Mutagenicity	negative
Reproduction toxicity	Tests in some animals may indicate that the technical active ingredient may have embryotoxic activity.

Specific target organ toxicity (single exposure) [mg/kg]	Source
no data available	100

Source : 100 - Firmendaten

SECTION 12: Ecological information

12.1 Toxicity

Hazardous ingredients

DIBENZOYL PEROXIDE

Toxicity to fish [mg/l]	Test criterion	Test species	Measuring method	Exposure duration	Source
0,0602	LC50	Oncorhynchus mykiss (rainbow trout)	OECD Test Guide-line 203	96 h	100

Source : 100 - Firmendaten

Toxicity to daphnia [mg/l]	Test criterion	Test species	Exposure duration	Measuring method	Source
0,110	EC 50	Daphnia magna (Water flea)	48 h	OECD Test Guide-line 202	100

Source : 100 - Firmendaten

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Toxicity to algae [mg/l]	Test criterion	Test species	Exposure duration	Measuring method	Source
0,0711	EC 50	Pseudokirchneriella subcapitata	72 h	OECD Test Guideline 201	100

Source : 100 - Firmendaten

Biodegradability Biodegradable. 68 % Remarks

inherently biodegradable

Measuring method OECD 301D/ EEC 92/69/V, C.4-E

Duration 28 day(s)

Ready degradability

Dicyclohexyl phthalate

Toxicity to fish [mg/l]	Test criterion	Test species	Measuring method	Exposure duration	Remarks	Source
(>2)	LD50	Orange-red killifish	OECD Test Guideline 203	96 h	maximum Solubility	100

Source : 100 - Firmendaten

Toxicity to algae [mg/l]	Test criterion	Test species	Exposure duration	Measuring method	Remarks	Source
(>2)	EC 50	Pseudokirchneriella subcapitata	72 h	OECD Test Guideline 201	maximum Solubility	100

Source : 100 - Firmendaten

NOEC (daphnia) [mg/l]	Test species	Exposure duration	Source
0,679	Daphnia magna (Water flea)	21 day(s)	100

Source : 100 - Firmendaten

NOEC (algae) [mg/l]	Test species	Measuring method	Exposure duration	Source
>2	Pseudokirchneriella subcapitata	OECD Test Guideline 201	72 hours	100

Source : 100 - Firmendaten

Biodegradability Readily biodegradable.

Ready degradability

Bioaccumulation no data available

Results of PBT characteristics determination This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

12.6 Other adverse effects

Environmental hazards

According to the results of tests of biodegradability this product is considered as being readily biodegradable.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal considerations

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. The following Waste Codes are only suggestions:

Waste Code

160903 - peroxides, for example hydrogen peroxide

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG	Air transport ICAO/IATA
14.1 UN-No	3106	3106	3106
14.2 Description of the goods	ORGANIC PEROXIDE TYPE D, SOLID	ORGANISCHES PEROXID, TYP D, FEST	ORGANIC PEROXIDE TYPE D, SOLID
14.2 UN proper shipping name		ORGANIC PEROXIDE TYPE D, SOLID	Organic peroxide type D, solid
14.3 Transport hazard class(es)	5.2	5.2	5.2
Danger releasing substance	dibenzoyl peroxide	dibenzoyl peroxide	dibenzoyl peroxide
14.5 Environmental hazards	U - Environmentally hazardous	U - marine pollutant	U - Environmentally hazardous
Labels	5.2 	5.2 	5.2
Category	2		
Factor	3		
Classification Code	P1		
Tunnel restriction code	D		
EmS		F-J;S-R	
Stowage category		D	

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not relevant

SECTION 15: Regulatory information

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

Additional regulations

Additionally, observe any national regulations!

SECTION 16: Other information

Relevant H-phrases

H241: Heating may cause a fire or explosion.
 H242: Heating may cause a fire.
 H317: May cause an allergic skin reaction.
 H319: Causes serious eye irritation.
 H361f: Suspected of damaging fertility.
 H400: Very toxic to aquatic life.
 H412: Harmful to aquatic life with long lasting effects.

Wording of the hazard classes

Org. Perox.: Organic peroxide
 Eye Irrit.: Serious eye irritation
 Skin Sens.: Skin sensitization
 Repr.: Reproductive toxicity

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Aquatic Acute: Hazardous to the aquatic environment

Aquatic Chronic: Hazardous to the aquatic environment

Modifications since last version

**Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]*

Modifications of the previous version are denoted with an asterisk ().*

<i>Classification</i>	<i>evaluation</i>
<i>Org. Perox. CD; H242</i>	
<i>Eye Irrit. 2; H319</i>	
<i>Skin Sens. 1; H317</i>	
<i>Repr. 2; H361f</i>	
<i>Aquatic Acute 1; H400</i>	
<i>Aquatic Chronic 3; H412</i>	

This information is provided in accordance with the current status of our knowledge and experience. The Safety Data Sheet describes products with a view to relevant safety requirements. This information does not constitute a warranty of properties, features or qualities.