

1. IDENTIFICATION OF THE SUBSTRATE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name/designation: Caltech QC Catalyst.

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

Relevant identified uses: Hardener.

Recommended restrictions: Reserved for industrial and professional use.

1.3 Supplier details

Alumasc Building Products Ltd
White House Works, Bold Road, Sutton, St Helens, Merseyside, United Kingdom, WA9 4JG
Tel: +44 (0)1744 648400
e-mail: technical@alumascroofing.com

1.4 Emergency telephone number

Association / Organisation: National Poisons Information Service
Emergency telephone numbers: 0344 892 0111 (Healthcare professionals only)
Other emergency telephone numbers Alumasc Building Products: +44 17 4464 8400
(Mon-Thurs – 08.30-17.00 Fri – 08.30-16.00)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP][1]:

Org. Perox. D; H242 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410.

2.2 Label elements

Hazard pictures:



Signal word: Danger.

Hazardous component(s) to be indicated on label: Dibenzoyl Peroxide.

Hazard statements: H242: Heating may cause a fire.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements prevention: P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P234: Keep only in original packaging.
P235: Keep cool.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Precautionary statements response: P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P337+P313: If eye irritation persists: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before reuse.
P391: Collect spillage.

Precautionary statements storage: P403: Store in a well-ventilated place.
P420: Store separately.

Precautionary statements disposal: P501: Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

2.3 Other hazards

Not available.

3. COMPOSITION AND INFORMATION ABOUT THE COMPONENTS

3.1 Substances

See 'Composition on ingredients' in Section 3.2.

3.2 Mixtures

Other data:

This mixture contains $\geq 1\%$ titanium dioxide (CAS 13463-67-7) The Annex VI classification of Titanium dioxide does not apply to this mixture according to its Section 10.

Ingredient	Numbers	Classification (EC) 1272/2008	M-factor	Concentration
Ethylene Dibenzoate	CAS No: 94-49-5 EC-No: 202-338-6 REACH No: 01-2120759933-41-XXXX	Aquatic Chronic 2; H411	Acute:1	45.0 - 50.0 % by weight
Dibenzoyl Peroxide	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 Aquatic Chronic 1; H410	Acute:10 Chronic:10	45.0 - 50.0 % by weight

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: If symptoms persist, call a physician.

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

Skin contact: Wash with plenty of soap and water.
If skin irritation occurs, get medical advice/ attention.

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

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

5. FIRE-FIGHTING 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 fire-fighters

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.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental Precautions

Do not flush into surface water or sanitary sewer system.

6.3 Methods and material for containment and 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.

7. HANDLING AND STORAGE

7.1 Precautions for 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

Suitable container:

Organic peroxides Type: OP II.
Store in original container.

Storage specifications:

Keep container tightly closed in a dry and well ventilated place.

TRGS 510:

5.2.

Recommended storage temperature:

Maximum 25°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ethylene Dibenzoate:

DNEL	Target group	Exposure route	Exposure frequency	Source
10,6 mg/m ³	Workers	Inhalation	Long term effects systemic	Company data
3 mg/m ³	Workers	Skin	Long term effects systemic	Company data

PNEC	Exposure route	Source
0,0073 mg/l	Fresh water	Company data
0,00073 mg/l	Seawater	Company data
2,23 mg/kg	Freshwater sediment	Company data
0,223 mg/kg	Marine sediment	Company data
128 mg/kg	Waste water pretreatment	Company data
0,44 mg/kg	Soil	Company data

Dibenzoyl Peroxide:

Great Britain	
Long term exposure value/ mg/m3	Source
5	EH40/2005 Workplace exposure limits (2011)

DNEL	Target group	Exposure route	Exposure frequency	Source
11,75 mg/m³	Workers	Inhalation	Long term effects	Company data
6,6 mg/kg	Workers	Dermal exposure	Long term effects	Company data
2,9 mg/m³	Consumers	Inhalation	Long term effects	Company data
3,3 mg/kg	Consumers	Dermal exposure	Long term effects	Company data
1,65 mg/kg	Consumers	Oral	Long term effects	Company data

8.2 Exposure controls

8.2.1. Appropriate engineering Controls:	Ensure adequate ventilation, especially in confined areas.
8.2.2. Personal protection:	
Eye and face protection:	Tightly fitting safety goggles.
Skin protection:	Wear suitable protective equipment. Long sleeved clothing
Hands/feet protection:	Protective gloves complying with EN 374. Please observe the instructions Unsuitable material Leather gloves Suitable material butyl-rubber Nitriles
Body protection:	See Other Protection below.
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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Important health, safety and environmental information

Physical state:	Solid	Explosion limits [Vol-%]	Not applicable
Form	Powdered form	Vapour pressure (kPa):	Not applicable
Colour:	whitish	Vapour density (Air = 1):	Not determined
Odour:	Characteristic	Density [g/cm³]	1,23 g/cm³
Odour threshold:	Not determined	Relative density:	Not determined
pH (as supplied):	Not available	Solubility in water [g/l]:	Not determined
Melting point/freezing point (°C):	Not applicable	Partition coefficient n-octanol/water:	Not determined
Boiling point (°C):	Not applicable	Autoinflammability	Not auto-flammable
Flash point (°C):	Not applicable	Auto-ignition temperature (°C):	>200
Flammability	Heating may cause a fire	Decomposition temperature:	55
Evaporation rate [kg/(s m²)]:	Not applicable	Viscosity dynamic [kg/(m s)]:	Not applicable
		Risk of explosion:	Risk of dust explosion

9.2 Other information

Ignition temperature [°C]: 55°C.
Bulk density [kg/m³]: 650 kg/m³.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Thermal decomposition:

Self-accelerating decomposition temperature (SADT) 55 °C.

10.4 Conditions to avoid

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

10.5 Incompatible materials

Rust, Iron, Copper, Acids, Reducing agents.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Oral toxicity [mg/kg]:

Hazardous ingredients:

Ethylene Dibenzoate				
Value	Test criterion	Test species	Measuring method	Source
>2001 mg/kg	LD50	Rat	OECD Test Guideline 416	Company data

Dibenzoyl Peroxide			
Value	Test criterion	Test species	Source
>5000 mg/kg	LD50	Rat	Company data

Inhalative toxicity [mg/l]:

Hazardous ingredients:

Dibenzoyl Peroxide					
Value	Test criterion	Test species	Note	Exposure duration [h]	Source
24,3 mg/l	LC50	Rat	OECD Test Guideline 403	4 hours	Company data

LC50 Inhalation 4h for dusts and sprays [mg/l]:

Hazardous ingredients:

Dibenzoyl Peroxide			
Value	Test criterion	Test species	Source
>24,3 mg/l	LC0	Rat	Company data

Irritant effect on skin:

Hazardous ingredients:

Ethylene Dibenzoate				
Value	Measuring method	Test species	Exposure duration [h]	Source
Irritating	OECD Test Guideline 404	Rabbit	4 hours	Company data

Dibenzoyl Peroxide			
Value	Test species	Measuring method	Source
Skin Irritation	Rabbits	OECD Test Guideline 404	Company data

Irritant effect on eyes:

Hazardous ingredients:

Ethylene Dibenzoate				
Value	Measuring method	Test species	Exposure duration [h]	Source
No eye irritation	OECD Test Guideline 405	Rabbit	1 hour	Company data

Dibenzoyl Peroxide				
Value	Measuring method	Test species	Source	
Eye irritation, revesibel innerhalb 21 tage	OECD Test Guideline 405	Rabbit	Company data	

Sensitization:

Hazardous ingredients:

Ethylene Dibenzoate				
Value	Measuring method	Test species	Remarks	Source
No eye irritation	OECD Test Guideline 405	Rabbit	Skin sensitization	Company data

Dibenzoyl Peroxide				
Value	Measuring method	Test species	Source	
Skin sensitization	OECD Test Guideline 429	Mouse	Company data	

Carcinogenic effects:

Hazardous ingredients:

Ethylene Dibenzoate		
Value	Source	
No known effect	Company data	

Dibenzoyl Peroxide		
Value	Source	
Did not show carcinogenic effects in animal experiments	Company data	

Mutagenicity:

Hazardous ingredients:

Ethylene Dibenzoate		
Value	Source	
No known effect	Company data	

Dibenzoyl Peroxide		
Value	Source	
Did not show mutagenic effects in animal experiments	Company data	

Reproduction toxicity:

Hazardous ingredients:

Ethylene Dibenzoate		
Value	Source	
No known effect	Company data	

Dibenzoyl Peroxide		
Value	Source	
No toxicity to reproduction	Company data	

Specific target organ toxicity (single exposure) [mg/kg]:

Hazardous ingredients:

Dibenzoyl Peroxide		
Value	Source	
No data available	Company data	

Specific target organ toxicity (repeated exposure) [mg/kg]:

Hazardous ingredients:

Dibenzoyl Peroxide	
Value	Source
Animal testing did not show any hazardous effects	Company data

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish [mg/l]:

Hazardous ingredients:

Ethylene Dibenzoate					
Value	Test criterion	Test species	Measuring method	Exposure duration [h]	Source
(>0,434) mg/l	LC50	Brachydanio rerio (zebra fish)	OECD Test Guideline 203	96 h	Company data

Dibenzoyl Peroxide					
Value	Test criterion	Test species	Measuring method	Exposure duration [h]	Source
0,0602 mg/l	LC50	Oncorhynchus mykiss (rainbow trout)	OECD Test Guideline 203	96 h	Company data

Toxicity to daphnia [mg/l]:

Hazardous ingredients:

Ethylene Dibenzoate					
Value	Test criterion	Test species	Measuring method	Exposure duration [h]	Source
1,4 mg/l	EC50	Daphnia magna (water flea)	OECD Test Guideline 211	21 day(s)	Company data

Dibenzoyl Peroxide					
Value	Test criterion	Test species	Measuring method	Exposure duration [h]	Source
0,110 mg/l	EC50	Daphnia magna (water flea)	OECD Test Guideline 202	48 h	Company data

Toxicity to algae [mg/l]:

Hazardous ingredients:

Ethylene Dibenzoate					
Value	Test criterion	Test species	Measuring method	Exposure duration [h]	Source
(>0,87) mg/l	ErC50	Pseudokirchneriella subcapitata	OECD Test Guideline 201	72 h	Company data

Dibenzoyl Peroxide					
Value	Test criterion	Test species	Measuring method	Exposure duration [h]	Source
0,0711 mg/l	EC50	Pseudokirchneriella subcapitata	OECD Test Guideline 201	72 h	Company data

NOEC (fish) [mg/l]:

Hazardous ingredients:

Ethylene Dibenzoate		
Value	Test species	Source
0,073 mg/l	Brachydanio rerio (zebra fish)	Company data

NOEC (daphnia) [mg/l]:

Hazardous ingredients:

Ethylene Dibenzoate			
Value	Test species	Measuring method	Source
0,65 mg/l	Daphnia magna (water flea)	OECD Test Guideline 211	Company data

NOEC (algae) [mg/l]:

Hazardous ingredients:

Ethylene Dibenzoate				
Value	Test species	Measuring method	Exposure duration [h]	Source
0,045 mg/l	Pseudokirchneriella subcapitata	OECD Test Guideline 201	72 h	Company data

12.2 Persistence and degradability

Biodegradability:

Hazardous ingredients:

Ethylene Dibenzoate				
Value	Duration	Measuring method	Method of analysis	Source
Readily Biodegradable 81%	28 day(s)	Closed bottle test	OECD 301D/ EEC 92/69/V, C.4-E	Company data

Dibenzoyl Peroxide				
Value	Duration	Measuring method	Remarks	Source
Biodegradable 68 %	28 day(s)	OECD 301D/ EEC 92/69/V, C.4-E	Inherently biodegradable	Company data

12.3 Bioaccumulation potential

Bioaccumulation:

Hazardous ingredients:

Dibenzoyl Peroxide	
Value	Source
3.2 Bioaccumulation is unlikely	Company data

12.5 Results of PBT and vPvB assessment

Ethylene Dibenzoate	
Value	Source
This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)	Company data

Dibenzoyl Peroxide	
Value	Source
This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)	Company data

12.6 Other adverse effects

Further information on ecology:

No information available.

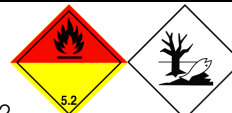
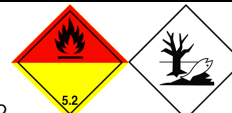
13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal Considerations:	Disposal of this product and its packaging must comply with all applicable environmental protection and waste disposal legislation, including any requirements set by local authorities. Any unwanted or non-recyclable material should be disposed of through a licensed waste disposal contractor. Transportation of such waste may be subject to ADR (International Carriage of Dangerous Goods by Road) regulations and must be managed in accordance with those requirements.
Waste code:	16 09 03* peroxides, for example hydrogen peroxide
Special precautions:	This material and its container must be disposed of in a safe way. Caution should be exercised when handling empty containers that have not been properly cleaned or rinsed, as they may retain hazardous residues. Spillage and wash water from cleaning tools must be prevented from entering soil, watercourses, drains, or sewer systems. Empty containers should be directed to authorised waste disposal or appropriate local recycling facilities.
Further information available via:	https://www.alumascroofing.com/downloads/disposal-guides/ 

14. TRANSPORT INFORMATION

Labels required:

	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	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
14.4 Packaging group			
14.5 Environmental hazards	U - Environmentally hazardous	U - marine pollutant	U - Environmentally hazardous
Labels			
Risk No.			
Category	2		
Factor	3		
Classification code	P1		
Tunnel restriction code	D		
EmS		F-J;S-R	
Stowage category		D	
UN proper shipping name	UN 3106 ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide)	UN 3106 ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide)	UN 3106 ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC code

Not relevant.

14.8 Additional information

Packaging type OP7.

15. REGULATORY INFORMATION

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

Additional regulations:
MAL-Code:

Additionally, observe any national regulations!
0-4.

16. OTHER INFORMATION

Full text Risk and Hazard codes:

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.

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.

EUH211: Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Wording of the hazard classes:

Aquatic Chronic: Hazardous to the aquatic environment.

Org. Perox.: Organic peroxide.

Eye Irrit.: Serious eye irritation.

Skin Sens.: Skin sensitization.

Aquatic Acute: Hazardous to the aquatic environment.

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

Classification	Evaluation
H242: Heating may cause a fire.	The product was tested according to the official UN test methods: the BAM Fallhammer test for impact sensitivity and the BAM friction sensitivity test. Result: Slightly sensitive
Org. Perox. D; H242	Calculated
Eye Irrit. 2; H319	Calculated
Skin Sens. 1; H317	Calculated
Aquatic Acute 1; H400	Calculated
Aquatic Chronic 1; H410	Calculated

SDS version summary:

Version	Date of Update	Section Updated
1.1	03/04/2023	Template Change
2.0	27/05/2025	Section 13 update

Other information:

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios.

The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 67/548/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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