ALLTIMES COATINGS
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Ready to Use BPO Catalyst

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

Product Identifier

Product Name:	Ready to Use BPO Catalyst
Chemical Name:	dibenzoyl peroxide, 50% with dicyclohexyl phthalate and silica
Product Code:	-

Recommended Use:	Polymerization initiator.
Recommended Restrictions:	Restricted to professional users.

Manufacturer/Importer/Distributor Information

Address:	Alltimes Coatings Limited Unit 17A, Nailsworth Mills Estate, Nailsworth, Gloucestershire, GL6 0BS. UK
Telephone:	01455 272 278
Mobile:	07773 329 424

SECTION 2: Hazards Identification

Classification of Substance or Mixture

Classification:	Org. Perox. D - Organic Peroxide Type D H242 - Heating may cause a fire. Skin Sens. 1 - Skin sensitisation, Category 1. H317 - May cause an allergic skin reaction. Eye Irrit. 2 - Serious eye irritation, Category 2. H319 - Causes serious eye irritation. Aquatic Acute 1 - Hazardous to the aquatic environment, acute, Category 1. H400 - Very toxic to aquatic life. Aquatic Chronic 1 - Hazardous to the aquatic environment, chronic, Category 1. H410 - Very toxic to aquatic life with long lasting effects. Repr.1B - Reproductive toxicity, Category 1B. H360D - May damage the unborn child.

Hazard Symbol(s):	GHS07  GHS02  GHS08  GHS09 
Signal Word:	DANGER
Hazard Statements:	H242 Heating may cause a fire H317 May cause an allergic skin reaction H319 Causes serious eye irritation H360D May damage the unborn child 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 P261 Avoid breathing dust/vapours P273 Avoid release to the environment 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 P333+P313 If skin irritation or rash occurs: Get medical advice/attention P501 Dispose of contents/container in accordance with local regulations
Other Hazards:	Component dicyclohexyl phthalate (CAS: 84-61-7) is on the Candidate List SVHC.

SECTION 3: Composition/Information on Ingredients

Mixture

CHEMICAL IDENTITY	Index No.	EC No.	CAS No.	REACH No.	Classification (EC 1272/2008)
Dibenzoyl peroxide:	617-008-00-0	202-327-6	94-36-0	01-2119511472 -50-0001	Org. Perox. B, H241 Skin Sens 1, H317 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Dicyclohexyl phthalate:	607-719-00-4	201-545-9	84-61-7	01-2119978223 -34-0000	Skin Sens. 1, H317 Repr. 1B, H360D Aquatic Chronic 3, H412
Silicon dioxide: (Obtained by Chemical Transformation)	-	231-545-4	112926-00-8 7631-86-9	01-2119379499 -16-0000	Not Classified.

SECTION 4: First Aid Measures

Description of First Aid Measures

Inhalation:	Remove to fresh air. Call a physician immediately.
Skin Contact:	May cause skin sensitization - wash skin with soap and water, if visible irritation, seek medical advice.
Eye Contact:	Flush abundantly open eyes with running water for at least 15 minutes, seek immediate medical advice.
Ingestion:	Do NOT induce vomiting. Call a physician immediately.

Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms:	Sensitization of the skin - redness, swelling, irritation of the eyes; Suspected of damaging fertility or the unborn child

Indication of Immediate Medical Attention and Special Treatment Needed

Treatment:	Physician should treat exposed patients symptomatically.

SECTION 5: Firefighting Measures

Extinguishing Media

Suitable Extinguishing Media:	Water spray, carbon dioxide, foam, sand
Unsuitable Extinguishing Media:	Do not use halons

Special Hazards

Special Hazards arising from the Substance or Mixture:	Product at the same accelerating the decomposition (+55°C) decomposes explosively. **NOTE:** The re-ignition may occur, the product supports combustion; vapours may form explosive mixtures with air; do not inhale the fumes from fire or explosion. **Products of combustion:** carbon dioxide, water. **Products of thermal decomposition:** carbon dioxide, oxygen, a mixture of benzoic acid, biphenyl, phenyl benzoate, a small amount of benzene.

Advice for Firefighters

Personal Protective Equipment:	Wear suitable fire resistant protective clothing respiratory protection equipment.
Other Information:	Extinguish a small fire with powder or carbon dioxide then apply water to prevent re-ignition, containers and equipment located near the fire should be cooled with water; water used to extinguish fire should not get into the sewer system and waterways.

SECTION 6: Accidental Release Measures

Personal Precautions:	Wear protective clothing, protective gloves, eye protection and face. Do not let to contaminate the peroxide into drains and ground water; avoid hot, contact with combustible materials and flammable substances.
Environmental Precautions:	Do not let enter drains, surface and ground water and soil.
Methods for Cleaning Up:	Protect drains. Collect material into sealable plastic containers and transported to the disposal site. Waste should NOT be closed.

SECTION 7: Handling and Storage

Safe Handling:	Weigh at temperature below than 25°C, do not mix directly with reducing agents, promoters, etc. Do not shake, do not throw, etc. Do not eat, drink or smoke in the production and storage. After work, wash your hands every time. Keep work clothing separately and do not take home. Do not use tools that cause sparks.
Safe Storage:	Keep away from sources of ignition, heat, light, at a temperature below 30°C. Do not smoke, before and after contact with the peroxide wash your hands thoroughly; Only use of a suitable tool material (polyethylene, polypropylene, stainless steel).

SECTION 8: Exposure Controls/Personal Protection

Control Parameters

Regulation of the Minister of Labor and Social Policy of 12 June 2018 on the highest allowable concentrations and intensities of agents harmful to health in the work environment (Journal of Laws of 2018, item 1286 of 3 July 2018).

CHEMICAL IDENTITY	Type	Exposure Limit Values
Dibenzoyl peroxide:	NDS	5 mg/m^3
	NDSCh	10 mg/m^3
	TWA	5 mg/m^3
	DNEL for Workers (Chronic exposure by inhalation, systemic)	39 mg/m^3
	DNEL for Workers (Dermal chronic, systemic)	13,3 mg / kg body weight / day
	DNEL for Workers (Dermal chronic, local)	34 µg/cm^2

CHEMICAL IDENTITY	Type	Exposure Limit Values
Dicyclohexyl phthalate:	NDS	Not Determined
	NDSCh	Not Determined
	DNEL for Employee (Chronic exposure by inhalation, systemic)	35.2 mg/m^3
	DNEL for Workers (Dermal chronic, systemic)	0.5 mg / kg body weight / day
	DNEL General Population (Chronic exposure by inhalation, systemic)	0.87 mg/m^3
	DNEL General Population (Chronic exposure through the skin, systemic)	0.25 mg / kg body weight / day
	DNEL General Population (Chronic oral, systemic)	0.25 mg / kg body weight / day

CHEMICAL IDENTITY	Type	Exposure Limit Values
Silicon dioxide:	NDS - Total dust	10 mg/m^3
	NDS - Respirable dust	2 mg/m^3

Exposure Controls

Appropriate Engineering Controls:	Make sure that working area is well ventilated. Explosion proof ventilation is recommended.
Eye/Face Protection:	Use safety goggles or face protection from plexiglass
Skin Protection:	Use appropriate protective antistatic clothing. Use appropriate protective gloves of synthetic rubber like neoprene or butyl-rubber (thickness: 0.5 mm, rupture time > 8h)
Respiratory Protection:	Use short duration filter unit: Filter A
Thermal Hazard:	In normal work condition – no thermal hazard
Hygiene Measures:	General regulations on hygiene. Do not allow them to cross in the workplace environment, regulatory exposure limits. After working Remove contaminated clothing - not to take home. Do not eat, drink or smoke in the production and storage facilities. After work, wash your hands each time.

Environmental Exposure Controls

Protect against the introduction into the municipal water and sewage system and watercourses.

CHEMICAL IDENTITY	Type	Exposure Limit Values
Dibenzoyl peroxide:	PNEC freshwater	0.02 µg/l
	PNEC sea water	0.002 µg/l
	PNEC sediment freshwater	0.013 mg/k
	PNEC sediment sea water	0.001 mg/kg
	PNEC soil	0.002 mg /kg
	PNEC STP	0.35 mg/l

CHEMICAL IDENTITY	Type	Exposure Limit Values
Dicyclohexyl phthalate:	PNEC freshwater	0.00362 mg/l
	PNEC sea water	0.000362 mg/l
	PNEC periodic release	0.0362 mg/l
	PNEC sediment sea water	1.06 mg/kg
	PNEC soil	0.21 mg/kg
	PNEC STP	10 mg/l

SECTION 9: Physical and Chemical Properties

Physical State/Form:	Powder
Colour:	White
Odor:	Faint
Odor Thresold:	Not specified
pH:	ca. 7
Melting/Freezing Point:	Not determined
Boiling Point/Range:	Not determined
Flash Point:	Not determined
Evapouration Rate:	Not determined
Flammability:	Flammable (solid, gas)
Upper/Lower Explosive Limit:	Not applicable
Vapour Pressure/Density:	Not determined
Bulk Density:	600 -700 kg/m3
Solubility(ies):	Insoluble in Water
Partition Coefficient (n-octanol/water):	Not determined
Auto-Ignition Temperature:	Not determined
Decomposition Temperature:	Self Accelerating Decomposition Temperature SADT: +55°C
Viscosity:	Not applicable in accordance with Annex XI of the REACH Regulation (solid)
Explosive Properties:	No
Oxidising Properties:	Organic peroxide

Other Information:	Active oxygen content: 3.24 – 3.47%

SECTION 10: Stability and Reactivity

Reactivity:	Sensitive to exothermic decomposition, decomposition is initiated by heat, contact with impurities (e.g. acids, heavy metal compounds, amines), friction or impact.
Chemical Stability:	Under heat rapidly disintegrate.
Possibility of Hazardous Reactions:	SADT (self accelerating decomposition temperature) possible at temperature above approximately +55°C, vapour may form explosive mixtures with air.
Conditions to Avoid:	Avoid high temperatures, light, pollution, rust.
Incompatible Materials:	Avoid contact with acids, alkalis, amines.
Hazardous Decomposition Products:	Hydrocarbons, derivatives of benzoic acid, irritating, corrosive, flammable gases may be formed in a fire or decomposition.

SECTION 11: Toxicological Information

DIBENZOYL PEROXIDE	
Acute Toxicity:	oral: no adverse effect observed DNEL: 2000 mg/kg bw; LD50(mouse): > 2000 mg/kg dermal: no study available inhalation: no adverse effect observed DNEL: 24300 mg/m3; LC50(rat); 24,3 mg/l (exp.time: 4h)
Skin Corrosion/Irritation:	no adverse effect observed – not irritant
Serious Eye Damage/Irritation:	adverse effect observed – irritant
Respiratory or Skin Sensitisation:	adverse effect observed – cause sensitisation by skin contact
Germ Cell Mutagenicity:	in vitro/in vivo - no adverse effect observed (negative result)
Carcinogenicity:	oral, skin - no relevant information available inhalation – no data available
Reproductive Toxicity:	no data available
STOT – Single Exposure:	not classified based on available information
STOT – Repeated Exposure:	not classified based on available information
Repeated Dose Toxicity:	not classified for repeated dose toxicity oral: adverse effect observed NOAEL: 200 mg/kg bw/day (rat, chronic) skin (systemic): no adverse effect observed NOAEL: 833 mg/kg bw/day (rat, chronic) skin (local): adverse effect observed NOAEL: 0.17 mg/cm2 (mouse, chronic) inhalation (systemic, local): no data available
Aspiration Hazard:	not classified based on available information

DICYCLOHEXYL PHTHALATE	
Acute Toxicity:	LD50 (rat):> 2000 mg / kg
Skin Corrosion/Irritation:	no present – not classified
Serious Eye Damage/Irritation:	eyes – slightly irritation – not classified
Respiratory or Skin Sensitisation:	possible sensitization by skin contact
Germ Cell Mutagenicity:	not occur
Carcinogenicity:	not occur
Reproductive Toxicity:	may damage the unborn child rat 240 ppm NOAEL
STOT – Single Exposure:	no data available
STOT – Repeated Exposure:	no data available
Repeated Dose Toxicity:	NOAEL rat, 50 mg/kg bw../day
Aspiration Hazard:	no data available

SILICON DIOXIDE	
Acute Toxicity:	oral - LD50 (rat):> 10000 mg / kg inhalation - LC0 (rat, 4h): 0.139 mg / l skin - LC50(rabbit): > 5000 mg / kg
Skin Corrosion/Irritation:	no present – not classified
Serious Eye Damage/Irritation:	no present – not classified
Respiratory or Skin Sensitisation:	no present – not classified
Germ Cell Mutagenicity:	not occur
Carcinogenicity:	not occur
Reproductive Toxicity:	not occur
STOT – Single Exposure:	no data available
STOT – Repeated Exposure:	no data available
Repeated Dose Toxicity:	no data available
Aspiration Hazard:	no data available

Other Hazards:	no more information available

SECTION 12: Ecological Information

Toxicity

Dibenzoyl peroxide:	EC50 (48h) (Daphnia magna)	0.110 mg/l NOEC: 0.0765 mg/l
	EC50 (96h) (fish)	0.0602 mg/l NOEC: 0.0316 mg/l
	EC50 (72h) (algae)	0.0711 mg/l NOEC: 0.02 mg/l
	EC50 (0.5h) (bacteria)	35 mg/l

Dicyclohexyl phthalate:	EC50 (48h) (Daphnia magna)	> 2 mg/l acute toxic
	NOEC (21 days) (Daphnia magna)	0,679 mg/l chronic toxic
	LC50 (96h) (fish)	> 2 mg/l
	IC50 (72h) (algae)	0,06 mg/l

Persistence and Degradability

Dibenzoyl peroxide:	It is hydrolytically unstable under basic conditions, acidic and neutral. Benzoic acid is the major compound produced by the decomposition during hydrolysis.

Dicyclohexyl phthalate:	readily biodegradable - 91% - 28 days

Bioaccumulative Potential

Dibenzoyl peroxide:	Log Kow = 3.2 indicates a low probability of bioaccumulation; readily biodegradable

Dicyclohexyl phthalate:	Potential low, lg Pow 4.82 (25°C), BCF: 85 – 90

Mobility in Soil

Dibenzoyl peroxide:	Koc = 6310 at temp. 20°C

Dicyclohexyl phthalate:	substance is insoluble, log Koc = 3.46 at temp. 20°C

Results of PBT and vPvB Assessment

Dibenzoyl peroxide:	not a PBT / vPvB

Dicyclohexyl phthalate:	not a PBT / vPvB

SECTION 13: Disposal Considerations

General Information:	Spilled product collect for recycling. The product expired - for recycling. Waste code 16 03 05* “organic wastes containing dangerous substances”. The product may be disposed of by incineration. Burning should be done in a location away from buildings and industrial facilities in a specialized furnace to burn waste chemicals. Packaging of the product be disposed of as hazardous waste code 15 01 10* “Packaging containing residues of or contaminated by dangerous ...”

SECTION 14: Transport Information

International Regulations

	ADR/RID	ADN/ADNR	IMDG	IATA
UN/ID Number:	3016	3016	3016	3016
Proper Shipping Name:	ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide)			
Hazard Class:	5.2	5.2	5.2	5.2
Classification Code:	P1	-	-	-
Labels:	5.2	-	-	-
Packing Group:	not determined, recommended **II**	no data	no data	no data
Environmental Hazards:	Yes			
Special Precautions for User:	Restriction code tunnels: **(D)**	no data	EmS: **F-J, S-R** Segregation of cargo: Cat. D (acid / base)	no data
Maritime Transport in Bulk According to IMO Instruments:	Not authorized for carriage in bulk			

SECTION 15: Regulatory Information

Safety, Health and Environmental Regulations/Legislation

Regulation / Legislation:	Regulation No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and latest changing. Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation), ATP. European Agreement Concerning the International Carriage of Dangerous Goods by Road, 2021. Candidate List SVHC, updated on 17/01/2022: There is the component of the mixture on the list - Dicyclohexyl phthalate CAS: 84-61-7

Chemical Safety Assessment

Safety Information:	Not available

SECTION 16: Other Information

Hazard Statements in Full:	H241 - Heating may cause a fire or explosion H317 - May cause an allergic skin reaction H319 - Irritating to eyes H360D - May damage the unborn child H400 - Very toxic to aquatic organisms H410 - Very toxic to aquatic life with long lasting effects H412 - Harmful to aquatic life with long lasting effects
Legislation:	SDS is prepared in accordance with Commission Regulation (EU) No. 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Restriction of Chemicals (REACH). Source: Chemical Safety Report of the substance: Dibenzoyl peroxide, SDS of the mixture components. Used to the evaluation of information (classification) the method of calculation and the published literature concerning the classification of organic peroxides. Update: supplemented and/or verified subsection: 1.1, 1.2, 2.2, 9.1m,s, 11.2, 12.6, 12.7, 15.1, 16.
Abbreviations & Acronyms Used in the Safety Data Sheet:	BCF = Bio Concentration Factor. DNEL = derived dose level (concentration) at which no observed adverse effect level [mg/kg, mg/l]. PNEC = predicted concentrations do not cause changes in the environment [mg/kg, mg/l]. NOEC = the highest dose, or concentration of a toxic substance at which no adverse effect is observed in its operation. NOAEL = no observable adverse effect level. NDS Exposure Limit = the average weighted concentration, the impact on the employee, during an 8-hour daily and average weekly working time laid down in the Labour Code, the period of its activity should not cause negative changes in its state of health and in the health of future generations. NDSCh = Maximum Acceptable Concentrations Momentarily, the average concentration that should not cause adverse changes in the health of the worker, whether in the workplace no longer than 15 minutes and not more than two times during the work shift, with an interval of not less than one hour.

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Alltimes Coatings Ltd.
Unit 17A, Nailsworth Mills Estate,
Nailsworth, Gloucestershire,
GL6 0BS. UK

T: 01453 872 850
E: info@alltimescoatings.co.uk
W: www.alltimescoatings.co.uk