according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878





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2.0 17.00.202	24 6000000000	Date of first issue: 29.03.2016

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

1.1 Product identifier						
Trade name	:	BCHPC				
REACH Registration Number	:	01-2119966122-42-0002				
Substance name	:	Di(4-tert-butylcyclohexyl) peroxydicarbonate				
EC-No.	:	239-557-1				
1.2 Relevant identified uses of the	ne s	substance or mixture and uses advised against				
Use of the Sub- stance/Mixture	:	polymerisation initiators				
1.3 Details of the supplier of the safety data sheet						
Company	:	United Initiators GmbH DrGustav-Adolph-Str. 3 82049 Pullach				
Telephone	:	+49 / 89 / 74422 – 0				
E-mail address of person responsible for the SDS	:	contact@united-in.com				
1.4 Emergency telephone number +44 1235 239670	er					

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 12	72/2008)
Organic peroxides, Type C	H242: Heating may cause a fire.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Long-term (chronic) aquatic hazard, Cat- egory 3	H412: Harmful to aquatic life with long lasting effects.

#### 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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Haza	rd pictograms	:		!
Signa	l word	:	Danger	
Haza	rd statements	:	H317 May cau	may cause a fire. se an allergic skin reaction. to aquatic life with long lasting effects.
Preca	autionary statements	:	Prevention:	
			flames and other P234 Keep on P261 Avoid br P280 Wear pro	ay from heat, hot surfaces, sparks, open ignition sources. No smoking. ly in original packaging. eathing dust. otective gloves/ protective clothing/ eye protec- ion/ hearing protection.
				n case of fire: Use water spray, alcohol- ry chemical or carbon dioxide to extinguish.
			<b>Storage:</b> P411 Store at	temperatures not exceeding 30 °C.

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Substance name	:	Di(4-tert-butylcyclohexyl) peroxydicarbonate
EC-No.	:	239-557-1
Chemical nature	:	Organic Peroxide

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Solid

#### Components

Chemical name	CAS-No.	Concentration (%	M-Factor, SCL, ATE
	EC-No.	w/w)	
Di(4-tert-butylcyclohexyl)	15520-11-3	<= 100	
peroxydicarbonate	239-557-1		

### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General advice	:	Take off contaminated clothing and shoes immediately. Call a physician immediately. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice. Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended. Symptoms of poisoning may appear several hours later.
Protection of first-aiders	:	First Aid responders should pay attention to self-protection and use the recommended protective clothing
lf inhaled	:	Administer oxygen if breathing is difficult or cyanosis is ob- served. If breathed in, move person into fresh air. If not breathing, give artificial respiration. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	:	If symptoms persist, call a physician. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before re-use. If on skin, rinse well with water. If on clothes, remove clothes.
In case of eye contact	:	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses. Protect unharmed eye.

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			Keep eye wide op If eye irritation pe	en while rinsing. rsists, consult a specialist.
If swallowed		:	Keep respiratory	oughly with water.
	mportant symptoms a	ind e		-
Symp Risks		•	sensitising effects	ergic skin reaction.
TISK5		•		ergie skin reaction.
.3 Indica Treatr		me :		d special treatment needed cally and supportively.
-	j <b>uishing media</b> ple extinguishing media	:	Water spray jet Alcohol-resistant	f
			Carbon dioxide (C Dry chemical	
Unsui media	table extinguishing	:	Carbon dioxide (C Dry chemical	CO2)
media			Carbon dioxide (C Dry chemical High volume wate	CO2) er jet

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#### 5.3 Advice for firefighters

Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if nec- essary. Use personal protective equipment.
Specific extinguishing meth- ods	:	Do not use a solid water stream as it may scatter and spread fire. Remove undamaged containers from fire area if it is safe to do so. Use water spray to cool unopened containers.
Further information	:	Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment. Use a water spray to cool fully closed containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

<ul> <li>Personal precautions</li> <li>Follow safe handling advice and personal protective equipment recommendations.</li> <li>Use personal protective equipment.</li> <li>Avoid dust formation.</li> <li>Avoid breathing dust.</li> <li>Remove all sources of ignition.</li> <li>Never return spills in original containers for re-use.</li> <li>Treat recovered material as described in the section "D considerations".</li> </ul>	
---	--

#### 6.2 Environmental precautions

Environmental precautions	:	Prevent product from entering drains.
		Prevent further leakage or spillage if safe to do so.
		If the product contaminates rivers and lakes or drains inform
		respective authorities.

#### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up		tion at or below SADT. Clear spills immediately. Suppress (knock down) gases/vapours/mists with a water spray jet. To clean the floor and all objects contaminated by this materi- al, use plenty of water. Soak up with inert absorbent material. Isolate waste and do not reuse.
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Non-sparking tools should be used. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

#### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

#### **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

Technical measures	:	See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Advice on safe handling	:	Open drum carefully as content may be under pressure. Avoid formation of respirable particles. Protect from contamination. Do not swallow. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Take precautionary measures against static discharges. Never return any product to the container from which it was originally removed. Provide sufficient air exchange and/or exhaust in work rooms. Avoid confinement. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Smoking, eating and drinking should be prohibited in the ap- plication area. Wash thoroughly after handling. For personal protection see section 8. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
Advice on protection against fire and explosion	:	Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from heat and sources of ignition. Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. Keep away from combustible material. Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.
Hygiene measures	:	Avoid contact with skin, eyes and clothing. Keep away from food and drink. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.

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#### 7.2 Conditions for safe storage, including any incompatibilities

	Requirements for storage areas and containers	:	Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Store in cool place. Keep in a well-ventilated place. Contamination may result in dangerous pressure increases - closed containers may rupture. Observe label precautions. Store in accordance with the particular national regulations. Avoid impurities (e.g. rust, dust, ash), risk of decomposition. Electrical installations / working materials must comply with the technological safety standards. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
	Advice on common storage	:	Keep away from combustible materials. Keep away from strong acids, bases, heavy metal salts and other reducing substances.
	Recommended storage tem- perature	:	< 20 °C
	Further information on stor- age stability	:	Stable under recommended storage conditions.
7.3	Specific end use(s)		
	Specific use(s)	:	For further information, refer to the product technical data sheet.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### **Occupational Exposure Limits**

dusts non-specific 4 mg/m3 Value type (Form of exposure): OELV - 8 hrs (TWA) (Respirable dust) Basis: IE OEL

> 10 mg/m3 Value type (Form of exposure): OELV - 8 hrs (TWA) (inhalable dust) Basis: IE OEL

Contains no substances with occupational exposure limit values.

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Substance name	End Use	Exposure routes	Potential health ef- fects	Value
Di(4-tert- butylcyclohexyl) per- oxydicarbonate	Workers	Inhalation	Long-term systemic effects	5.87 mg/m3
	Workers	Skin contact	Long-term systemic effects	16.67 mg/kg bw/day

#### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Di(4-tert-butylcyclohexyl) peroxy- dicarbonate	Fresh water	0.39 mg/l
	Marine water	0.039 mg/l
	Intermittent use/release	0.39 mg/l
	Fresh water sediment	4685 mg/kg
	Marine sediment	468.5 mg/kg
	Soil	936.8 mg/kg
	Sewage treatment plant	2 mg/l

#### 8.2 Exposure controls

#### Engineering measures

Minimize workplace exposure concentrations.

#### Personal protective equipment

Eye/face protection	:	Ensure that eyewash stations and safety showers are close to the workstation location. Please follow all applicable local/national requirements whe selecting protective measures for a specific workplace. Always wear eye protection when the potential for inadverte eye contact with the product cannot be excluded. Tightly fitting safety goggles Please wear suitable protective goggles. Also wear face pro- tection if there is a splash hazard. Equipment should conform to EN 166	
Hand protection Material Break through time Glove thickness Directive		butyl-rubber <= 480 min 0.47 mm Equipment should conform to EN 374	
Material Break through time Glove thickness Directive	:	Nitrile rubber <= 480 min 0.40 mm Equipment should conform to EN 374	
Remarks	:	The data about break through time/strength of material are standard values! The exact break through time/strength of	

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		tive glove. depending ous substa plications, cals of the	as to be obtained from the producer of the protec- Choose gloves to protect hands against chemicals on the concentration and quantity of the hazard- ince and specific to place of work. For special ap- we recommend clarifying the resistance to chemi- aforementioned protective gloves with the glove rer. Wash hands before breaks and at the end of
Skin	and body protection	resistance potential. Additional task being posable su Wear as a	ropriate protective clothing based on chemical data and an assessment of the local exposure body garments should be used based upon the performed (e.g., sleevelets, apron, gauntlets, dis- its) to avoid exposed skin surfaces. opropriate: rdant antistatic protective clothing.
Resp	iratory protection	approved f	e of dust or aerosol formation use respirator with an ilter. with combination filter for vapour/particulate (EN
Fi	lter type	: Filter type	P
Prote	ctive measures	to the cond	f protective equipment must be selected according centration and amount of the dangerous substance cific workplace.

### **SECTION 9: Physical and chemical properties**

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

Physical state	: p	owder
Colour	: v	vhite
Odour	: c	haracteristic
Odour Threshold	: N	lo data available
Melting point/freezing point	: 8	82 °C

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					Decomposes below the melting point. Test Guideline 102
	Initial bo range	piling point and boiling	:	Decomposition: I Not applicable	Decomposes below the boiling point.
I	Flamma	bility	:	Organic peroxide	
		explosion limit / Upper pility limit	:	Upper explosion No data available	
		explosion limit / Lower pility limit	:	Lower explosion No data available	
I	Flash po	pint	:	Not applicable	
	Auto-igr	nition temperature	:	not determined	
		celerating decomposi- perature (SADT)	:	temperature at w	H.4 erating Decomposition Temperature. Lowest hich the tested package size will undergo a decomposition reaction.
I	pН		:	substance/mixtur	e is non-soluble (in water)
,	Viscosit Visc	ty osity, dynamic	:	Not applicable	
	Visc	osity, kinematic	:	Not applicable	
:	Solubilit Wate	y(ies) er solubility	:	0.6 µg/l (20 °C) insoluble	
	Partitior octanol/	n coefficient: n- /water	:	log Pow: 8.34 The value is calc	ulated
	Disp	ersion Stability	:	No data available	

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Vapo	ur pressure	: 0.01 Pa (20	°C)
Relat	ive density	: 1,103 (20 °C	;)
Dens	ity	: not determin	ed
Bulk	density	: ca. 500 kg/m	n3 (20 °C)
Relat	ive vapour density	: Not applicab	le
	cle characteristics article size	: not determin	ed
Pa	article Size Distribution	: No data avai	lable
Du	ustiness	: Avoid dust fo	prmation.
Sł	nape	: not determin	ed
Cr	rystallinity	: Not applicab	le
	urface treatment Coatings	: Not applicab	le
9.2 Other	information		
Explo	osives	: Not explosive Avoid dust fo	
Oxidi	zing properties	: The substan Organic perc	ce or mixture is not classified as oxidizing. oxide
Self-i	gnition	: The substan	ce or mixture is not classified as pyrophoric.
Self-h	neating substances	: The substan	ce or mixture is not classified as self heating.
Subs	tances and mixtures,	: The substan	ce or mixture does not emit flammable gases in

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	h in contact with water, flammable gases	cc	ontact with w	rater.	
Dese	ensitised explosives	: No	ot applicable		
2000					
Evap	poration rate	: No	ot applicable		

#### **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Stable under recommended storage conditions. Heating may cause a fire or explosion.

#### 10.2 Chemical stability

Stable under recommended storage conditions. No decomposition if stored normally.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : Dust may form explosive mixture in air.

#### 10.4 Conditions to avoid

Conditions to avoid

Protect from contamination.
 Contact with incompatible substances can cause decomposition at or below SADT.
 Heat, flames and sparks.
 Avoid confinement.

#### 10.5 Incompatible materials

Materials to avoid

: Accelerators, strong acids and bases, heavy metals and heavy metal salts, reducing agents

#### **10.6 Hazardous decomposition products**

Irritant, caustic, flammable, noxious/toxic gases and vapours can develop in the case of fire and decomposition

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SECTION 11: Toxicological information						
11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008						

SDS Number:

## Acute toxicity Not classified due to lack of data.

Revision Date:

Product: Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg Method: OECD Test Guideline 401 Assessment: The component/mixture is minimally toxic after single ingestion.
Acute inhalation toxicity	:	Remarks: No data available

Acute dermal toxicity	:	Remarks: No data available

#### Components:

#### Di(4-tert-butylcyclohexyl) peroxydicarbonate:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg Method: OECD Test Guideline 401 Assessment: The component/mixture is minimally toxic after single ingestion.
Acute inhalation toxicity	:	Remarks: No data available

Acute dermal toxicity	:	Remarks: No data available

#### Skin corrosion/irritation

Based on available data, the classification criteria are not met.

#### Product:

		Rabbit OECD Test Guideline 404 No skin irritation
Remarks	:	May cause skin irritation in susceptible persons.

#### Components:

#### Di(4-tert-butylcyclohexyl) peroxydicarbonate:

Species Method Result		Rabbit OECD Test Guideline 404 No skin irritation
Remarks	:	May cause skin irritation in susceptible persons.

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#### Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

#### Product:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	No eye irritation
Remarks	:	Product dust may be irritating to eyes, skin and respiratory system.

#### Components:

#### Di(4-tert-butylcyclohexyl) peroxydicarbonate:

•	 	
Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	No eye irritation
Remarks	:	Product dust may be irritating to eyes, skin and respiratory system.

#### Respiratory or skin sensitisation

#### Skin sensitisation

May cause an allergic skin reaction.

#### Respiratory sensitisation

Not classified due to lack of data.

#### Product:

Remarks

 -	Mouse OECD Test Guideline 429
	May cause sensitisation by skin contact.

: Causes sensitisation.

## Components:

#### Di(4-tert-butylcyclohexyl) peroxydicarbonate:

Species Method Result		Mouse OECD Test Guideline 429 May cause sensitisation by skin contact.
Remarks	:	Causes sensitisation.

#### Germ cell mutagenicity

Not classified due to lack of data.

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Prod	uct:			
Geno	toxicity in vitro	:	Method: OECD Result: negative	) Test Guideline 471 e
			Method: OECD Result: negative	) Test Guideline 476 e
			Method: OECD Result: negative	) Test Guideline 487 e
Geno	toxicity in vivo	:	Remarks: No c	lata available
<u>Com</u>	ponents:			
Di(4-t	ert-butylcyclohexyl)	perox	ydicarbonate:	
Geno	toxicity in vitro	:	Method: OECD Result: negative	) Test Guideline 471 e
			Method: OECD Result: negative	) Test Guideline 476 e
			Method: OECD Result: negative	) Test Guideline 487 e
Geno	toxicity in vivo	:	Remarks: No c	lata available
	i <b>nogenicity</b> lassified due to lack o	fdata		
Prod		i uata.		
Rema		:	This information	n is not available.
<u>Com</u>	ponents:			
Di(4-t	ert-butylcyclohexyl)	perox	ydicarbonate:	
Rema	arks	:	This information	n is not available.
•	oductive toxicity lassified due to lack o	f data.		
<u>Com</u>	ponents:			
Di(4-t	ert-butylcyclohexyl)	perox	ydicarbonate:	
Effect	ts on fertility	:	Remarks: This	information is not available.
Effect ment	ts on foetal develop-	:	Remarks: This	information is not available.

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#### STOT - single exposure

Not classified due to lack of data.

#### **Product:**

Remarks

: No data available

#### **Components:**

# Di(4-tert-butylcyclohexyl) peroxydicarbonate:

Remarks : No data available

#### STOT - repeated exposure

Not classified due to lack of data.

#### Repeated dose toxicity

#### **Product:**

:	Rat
:	500 mg/kg
:	1,000 mg/kg
:	Oral
:	28 d
:	OECD Test Guideline 407
	:

#### **Components:**

#### Di(4-tert-butylcyclohexyl) peroxydicarbonate:

Species	Rat
NOAEL	500 mg/kg
LOAEL	1,000 mg/kg
Application Route	Oral
Exposure time	28 d
Method	OECD Test Guideline 407

#### Aspiration toxicity

Not classified due to lack of data.

#### **Product:**

No data available

#### **Components:**

# Di(4-tert-butylcyclohexyl) peroxydicarbonate:

No data available

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#### 11.2 Information on other hazards

Endocrine disrupting properties						
Product:						
Assessment	: The substance/mixture does not contain components consid- ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.					
Further information						
Product:						
Remarks	: No data available					
Components:						
Di(4-tert-butylcyclohexyl) pe	oxydicarbonate:					
Remarks	: No data available					

### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Ρ	r	ο	d	u	С	t:
---	---	---	---	---	---	----

<u>I Toddet.</u>		
Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 704 mg/l Exposure time: 96 h
		Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 42 mg/l Exposure time: 48 h
		Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): 39 mg/l Exposure time: 72 h
		Method: OECD Test Guideline 201
Ecotoxicology Assessment		
Acute aquatic toxicity	:	Harmful to aquatic life.
Chronic aquatic toxicity	:	Harmful to aquatic life with long lasting effects.
Components:		
Di(4-tert-butylcyclohexyl) pe	ro	vydicarbonate:
		LOED (Operationality, multiple (reinhour trout)), 704 mg/

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			Exposure time: 9 Method: OECD T	6 h est Guideline 203
	icity to daphnia and other atic invertebrates	:	Exposure time: 4	nagna (Water flea)): 42 mg/l 8 h est Guideline 202
Toxi plan	icity to algae/aquatic ts	:	Exposure time: 7	smus subspicatus (green algae)): 39 mg/l 2 h ïest Guideline 201
Eco	toxicology Assessment			
	te aquatic toxicity	:	Harmful to aquation	c life.
Chro	onic aquatic toxicity	:	Harmful to aquation	c life with long lasting effects.
12.2 Per	sistence and degradabi	lity		
<u>Pro</u>	duct:			
Biod	degradability	:	Result: Not readil Method: OECD T	y biodegradable. est Guideline 301B
Con	nponents:			
Di(4	-tert-butylcyclohexyl) p	ero	xydicarbonate:	
Biod	degradability	:	Result: Not readil Method: OECD T	y biodegradable. est Guideline 301B
12.3 Bio	accumulative potential			
<u>Pro</u>	duct:			
Bioa	accumulation	:	Bioconcentration	factor (BCF): 2,926
Con	nponents:			
Di(4	-tert-butylcyclohexyl) p	ero	xydicarbonate:	
Bioa	accumulation	:	Bioconcentration	factor (BCF): 2,926
	ition coefficient: n- anol/water	:	log Pow: 8.34 Remarks: Calcula	ation
	<b>bility in soil</b> data available			
12.5 Res	sults of PBT and vPvB a	sse	ssment	
	<u>duct:</u> essment	:	This substance/m	nixture contains no components considered
			18 / 24	

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to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Endocrine disrupting properties

Product:	
Assessment	: The substance/mixture does not contain components consid- ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
12.7 Other adverse effects	
Product: Additional ecological infor- mation	: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.
Components:	
Di(4-tert-butylcyclohexyl)	peroxydicarbonate:

Additional ecological infor-	:	An environmental hazard cannot be excluded in the event of
mation		unprofessional handling or disposal.
		Harmful to aquatic life with long lasting effects.

### **SECTION 13: Disposal considerations**

13.1 Waste treatment methods	
Product	<ul> <li>Dispose of wastes in an approved waste disposal facility. The product should not be allowed to enter drains, water courses or the soil.</li> <li>Do not contaminate ponds, waterways or ditches with chemi- cal or used container.</li> </ul>
	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
Contaminated packaging	<ul> <li>Dispose of in accordance with local regulations.</li> <li>Clean container with water.</li> <li>Dispose of contents/ container to an approved waste disposal plant.</li> <li>Empty remaining contents.</li> </ul>

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Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

### **SECTION 14: Transport information**

14.1 UN number or ID number				
ADR	:	UN 3114		
RID	:	UN 3114 Not permitted for transport		
IMDG	:	UN 3114		
ΙΑΤΑ	:	UN 3114 Not permitted for transport		
14.2 UN proper shipping name				
ADR	:	ORGANIC PEROXIDE TYPE C, SOLID, TEMPERATURE CONTROLLED (DI-(4-tert-BUTYLCYCLOHEXYL)PEROXYDICARBONATE)		
RID	:	ORGANIC PEROXIDE TYPE C, SOLID, TEMPERATURE CONTROLLED Not permitted for transport		
IMDG	:	ORGANIC PEROXIDE TYPE C, SOLID, TEMPERATURE CONTROLLED (DI-(4-tert-BUTYLCYCLOHEXYL)PEROXYDICARBONATE)		
ΙΑΤΑ	:	ORGANIC PEROXIDE TYPE C, SOLID, TEMPERATURE CONTROLLED Not permitted for transport		
14.3 Transport hazard class(es)				
		Class Subsidiary risks		
ADR	:	5.2		
RID	:	Not permitted for transport		
IMDG	:	5.2		
ΙΑΤΑ	:	Not permitted for transport		
14.4 Packing group	14.4 Packing group			
ADR Packing group Classification Code Labels Tunnel restriction code RID		Not assigned by regulation P2 5.2 (D) Not permitted for transport		

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#### IMDG

Packing group Labels EmS Code	<ul> <li>Not assigned by regulation</li> <li>5.2</li> <li>F-F, S-R</li> </ul>
IATA (Cargo) IATA (Passenger)	<ul><li>Not permitted for transport</li><li>Not permitted for transport</li></ul>

#### 14.5 Environmental hazards

<b>ADR</b> Environmentally hazardous	: no
RID	: Not permitted for transport
IMDG Marine pollutant	: no

#### 14.6 Special precautions for user

#### Additional advice

Temperature controlled t	ranspo	ort.:
Control temperature	:	30 °C
Emergency temperature	:	35 °C

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

#### SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislature	ation specific for the substance or mix-
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	: Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	: Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	: Not applicable

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Regulation (EU) 2019/1021 on persistent organic pollu- tants (recast)	- : Not applicable
Regulation (EC) No 649/2012 of the European Parlia- ment and the Council concerning the export and import of dangerous chemicals	: Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	: Not applicable
Seveso III: Directive 2012/18/EU of the Euro-P6b pean Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES

#### Other regulations:

Gefahrgruppe nach TRGS 741: la (German regulatory requirements)

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

#### The components of this product are reported in the following inventories:

TCSI (TW)	:	On the inventory, or in compliance with the inventory
TSCA (US)	:	All substances listed as active on the TSCA inventory
AIIC (AU)	:	On the inventory, or in compliance with the inventory
DSL (CA)	:	All components of this product are on the Canadian DSL
ENCS (JP)	:	On the inventory, or in compliance with the inventory
ISHL (JP)	:	On the inventory, or in compliance with the inventory
KECI (KR)	:	On the inventory, or in compliance with the inventory
PICCS (PH)	:	On the inventory, or in compliance with the inventory
IECSC (CN)	:	On the inventory, or in compliance with the inventory

#### 15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance. For further information see eSDS.

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### **SECTION 16: Other information**

Further information		
Other information	:	This safety datasheet only contains information relating to safety and does not replace any product information or prod- uct specification. These safety instructions also apply to empty packaging which may still contain product residues. The hazards on the label also apply to residues in the con- tainer.
Sources of key data used to compile the Safety Data Sheet	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/

#### Full text of other abbreviations

IE OEL	:	List of Chemical Agents and Carcinogens with Occupational
		Exposure Limit Values - Code of Practice, Schedule 1 and 2
IE OEL / OELV - 8 hrs (TWA)	:	Occupational exposure limit value (8-hour reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AllC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule: ENCS - Existing and New Chemical Substances (Japan): ErCx - Concentration associated with x% growth rate response: GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Re-

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striction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Haz ardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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