TMCH-90-AL

Version	Revision Date:	SDS Number:	Date of last issue: 2021/03/26
5.0	2024/09/12	60000000196	Date of first issue: 2017/05/04

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	TMCH-90-AL				
Chemical nature	:	Organic Peroxide Liquid mixture				
Manufacturer or supplier's de	etai	ils				
Company	:	United Initiators (Shanghai) Co., Ltd				
Address	:	Room 501, Bldg. 1, No. 1 Shangda Road Shanghai, China, 200444				
Emergency telephone number	:	+86 21 61172762				
E-mail address	:	cs-initiators.cn@united-in.com				
Recommended use of the chemical and restrictions on use Recommended use : polymerisation initiators						

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance Colour Odour	:	liquid colourless musty				
Combustible liquid. Heating may cause a fire. May be fatal if swallowed and enters airways. May cause damage to organs through prolonged or repeated exposure. May cause long lasting harm-ful effects to aquatic life.						
GHS Classification						
Flammable liquids	:	Category 4				
Organic peroxides	:	Туре С				
Specific target organ toxicity - repeated exposure	:	Category 2				
Aspiration hazard	:	Category 1				
Long-term (chronic) aquatic hazard	:	Category 4				

GHS label elements

according to GB/T 16483 and GB/T 17519



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Haza	ard pictograms		
Sign	al word	: Danger	
Haza	ard statements	H304 May be f H373 May cau peated exposu	may cause a fire. atal if swallowed and enters airways. se damage to organs through prolonged or re-
Prec	autionary statements	Prevention:	
		No smoking. P220 Keep/ St P234 Keep on P260 Do not b P273 Avoid rel	ay from heat/ sparks/ open flames/ hot surfaces. ore away from clothing/ combustible materials. ly in original container. reathe mist or vapours. ease to the environment. otective gloves/ eye protection/ face protection.
		CENTER/ doct P314 Get med P331 Do NOT P370 + P378 I	F SWALLOWED: Immediately call a POISON for. ical advice/ attention if you feel unwell. induce vomiting. n case of fire: Use water spray, alcohol-resistant nical or carbon dioxide to extinguish.
		Storage:	
		P405 Store I P410 Protec P411 + P235 86 °F. Keep co	ocked up. t from sunlight. Store at temperatures not exceeding < 30 °C/ < ool. away from other materials.
		Disposal: P501 Dispose disposal plant.	of contents/ container to an approved waste

Physical and chemical hazards

Combustible liquid. Heating may cause a fire.

Health hazards

May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways.

Environmental hazards

May cause long lasting harmful effects to aquatic life.



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Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
di-tert-butyl 3,3,5-trimethylcyclohexylidene di- peroxide	6731-36-8	>= 85 -< 90
Hydrocarbons, C4, 1,3-butadiene-free, pol-	93685-81-5	>= 10 -< 15
ymerised., triisobutylene fraction, hydrogenated		

4. 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. No artificial respiration, mouth-to-mouth or mouth to nose. Use suitable instruments/apparatus.
If 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. Call a physician or poison control centre immediately. If unconscious, place in recovery position and seek medical advice. Keep respiratory tract clear.
In case of skin contact :	If symptoms persist, call a physician. 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. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed :	Call a physician immediately. Contact a poison control center.



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				Keep respiratory t Do NOT induce ve If symptoms persi	
	Most important symptoms and effects, both acute and delayed		:	: May be fatal if swallowed and enters airways. May cause damage to organs through prolonged or repeate exposure.	
	Protect	ion of first-aiders	:		ers should pay attention to self-protection nmended protective clothing
	Notes t	o physician	:	Treat symptomati	cally and supportively.
5. FI	IREFIGI	HTING MEASURES			
	Suitable	e extinguishing media	:	Water spray jet Alcohol-resistant f Carbon dioxide (C Dry chemical	
	Unsuita media	able extinguishing	:	High volume wate	r jet
	Specific	c hazards during fire-	fire- Risk of explosion if heated under confinement. Possible emission of gaseous decomposition products lead to a dangerous pressure build-up. Avoid confinement. Contact with incompatible materials or exposure to ten- tures exceeding SADT may result in a self-acceleratin composition reaction with release of flammable vapors may auto-ignite. The product burns violently. Flash back possible over considerable distance. Do not allow run-off from fire fighting to enter drains o courses. Vapours may form explosive mixtures with air. The product will float on water and can be reignited or water. Cool closed containers exposed to fire with water spra-		a of gaseous decomposition products may us pressure build-up. it. mpatible materials or exposure to tempera- GADT may result in a self-accelerating de- ion with release of flammable vapors which is violently. ble over considerable distance. off from fire fighting to enter drains or water in explosive mixtures with air. oat on water and can be reignited on surface
	Specific extinguishing meth- ods		:	cumstances and t Use a water spray Collect contamina must not be disch Fire residues and	measures that are appropriate to local cir- he surrounding environment. / to cool fully closed containers. ted fire extinguishing water separately. This arged into drains. contaminated fire extinguishing water must accordance with local regulations.



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			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.				
	al protective equipment efighters	:	essary.	ed breathing apparatus for firefighting if nec- tective equipment.			

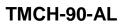
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	Follow safe handling advice and personal protective equip- ment recommendations. Beware of vapours accumulating to form explosive concentra- tions. Vapours can accumulate in low areas. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.
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.
Methods and materials for containment and cleaning up	Contact with incompatible substances can cause decomposi- 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. Non-sparking tools should be used. Local or national regulations may apply to releases and dis- posal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter- mine which regulations are applicable.
Prevention of secondary hazards	Never return spills in original containers for re-use. Treat recovered material as described in the section "Disposa considerations".

7. HANDLING AND STORAGE

Handling

according to GB/T 16483 and GB/T 17519





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Te	Technical measures		:	See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.			
	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. Do not spray on a naked flame or any incandescent materia			
Ad	Advice on safe handling		:	 Open drum carefully as content may be under pressure. Protect from contamination. Do not swallow. Do not breathe vapours/dust. Avoid formation of aerosol. 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 roor Avoid confinement. Keep away from heat, hot surfaces, sparks, open flames an other ignition sources. No smoking. Smoking, eating and drinking should be prohibited in the application area. Wash thoroughly after handling. For personal protection see section 8. 			
Av	voidar	nce of contact	:	Accelerators, stro heavy metal salts	ng acids and bases, heavy metals and , reducing agents		
St	torage	9					
	-	ons for safe storage	:	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 an kept upright to prevent leakage.			
М	lateria	ls to avoid	:		combustible materials. strong acids, bases, heavy metal salts and bstances.		



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Recommended storage tem- perature		:	< 30 °C				
Furthe age sta	r information on stor- ability	:	Stable under reco	mmended storage conditions.			
8. EXPOSU	8. EXPOSURE CONTROLS/PERSONAL PROTECTION						
-	onents with workplac		-	limit values.			
Engine	eering measures	:	Minimize workpla	ce exposure concentrations.			
Perso	nal protective equipm	ent					
	atory protection	:		t or aerosol formation use respirator with an			
		-	approved filter.				
Filte	er type	:	ABEK-filter				
Eye/fa	ce protection	:	to the workstation Please follow all a selecting protectiv Always wear eye eye contact with t Tightly fitting safe	applicable local/national requirements when ve measures for a specific workplace. protection when the potential for inadvertent he product cannot be excluded. ty goggles ble protective goggles. Also wear face pro-			
Skin and body protection		:	resistance data an potential. Additional body g task being perform posable suits) to a Wear as appropri	e protective clothing based on chemical nd an assessment of the local exposure arments should be used based upon the ned (e.g., sleevelets, apron, gauntlets, dis- avoid exposed skin surfaces. ate: intistatic protective clothing.			
Mat Bre	protection terial ak through time ve thickness	:	butyl-rubber < 60 min 0.70 mm				
Mat	terial	: Nitrile rubber					
	ak through time	:	<= 480 min				
Glo	ve thickness	:	0.40 mm				
Rer	Remarks : The data about break through time/strength of material a standard values! The exact break through time/strength						

according to GB/T 16483 and GB/T 17519



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		tive glove. Cho depending on t ous substance plications, we cals of the afor	be obtained from the producer of the protec- bose gloves to protect hands against chemicals the concentration and quantity of the hazard- and specific to place of work. For special ap- recommend clarifying the resistance to chemi- rementioned protective gloves with the glove Wash hands before breaks and at the end of
Prote	ective measures		otective equipment must be selected according ration and amount of the dangerous substance workplace.
Hygie	ene measures	Keep away fro When using do When using do	with skin, eyes and clothing. m food and drink. o not eat or drink. o not smoke. efore breaks and immediately after handling

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	colourless
Odour	:	musty
Odour Threshold	:	not determined
рН	:	substance/mixture is non-soluble (in water)
Melting point/ range	:	< -25 °C
Boiling point/boiling range	:	Decomposition: Decomposes below the boiling point.
Flash point	:	63 °C
		Method: ISO 3679, open cup
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Flammability (liquids)	:	Organic peroxide
Self-ignition	:	The substance or mixture is not classified as pyrophoric.



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	r explosion limit / Upper nability limit	:	Upper explosion 4 %(V) (for a component	
	r explosion limit / Lower nability limit	:	Lower explosion 0.5 %(V) (for a component	
Vapo	ur pressure	:	< 0.09 hPa (20 °	C)
Relat	ive vapour density	:	not determined	
Relat	ive density	:	not determined	
Dens	ity	:	0.895 g/cm3 (20	°C)
	bility(ies) ater solubility	:	insoluble	
	ion coefficient: n- ol/water	:	Not applicable	
Auto-	ignition temperature	:	not determined	
	Self-Accelerating decomposi- tion temperature (SADT)		temperature at w	t H.4 erating Decomposition Temperature. Lowest hich the tested package size will undergo a decomposition reaction.
Visco Vi	sity scosity, dynamic	:	18 mPa.s (20 °C	;)
Vi	scosity, kinematic	:	not determined	
Explo	Explosive properties		Not explosive In air mixture.	use, may form flammable/explosive vapour-
Oxidi	zing properties	: The substance or mixture is not classified as oxidizing. Organic peroxide		
Self-h	neating substances	:	The substance o	r mixture is not classified as self heating.
Refra	ctive index	:	1.438 (20 °C)	

10. STABILITY AND REACTIVITY

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

:



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Cherr	nical stability	:		ommended storage conditions. n if stored normally.
Possi tions	bility of hazardous reac-	• :	Vapours may for	m explosive mixture with air.
Cond	itions to avoid	:	Protect from con Contact with inco tion at or below \$ Heat, flames and Avoid confineme	ompatible substances can cause decomposi- SADT. I sparks.
Incom	npatible materials	:		ong acids and bases, heavy metals and s, reducing agents
Haza produ	rdous decomposition cts	:		lammable, noxious/toxic gases and vapours he case of fire and decomposition

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified due to lack of data.

Components:

di-tert-butyl 3,3,5-trimethylcyclohexylidene diperoxide:

Acute oral toxicity :	LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 401 Assessment: The substance or mixture has no acute oral tox- icity
Acute inhalation toxicity :	LC50 (Rat): > 5.6 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 436 Assessment: The substance or mixture has no acute inhala- tion toxicity
Acute dermal toxicity :	LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute dermal toxicity
Hydrocarbons, C4, 1,3-butadie	ne-free, polymerised., triisobutylene fraction, hydrogenated:
Acute oral toxicity :	LD50 (Rat): > 5,000 mg/kg Method: OECD Test Guideline 401 Assessment: The substance or mixture has no acute oral tox- icity Remarks: Based on data from similar materials

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Acute	inhalation toxicity		Exposure time Test atmosphe	
			Remarks: No o	lata available
Acute dermal toxicity			Method: OECE	Rabbit): 3,16 ml/kg D Test Guideline 402 ed on data from similar materials
	corrosion/irritation assified due to lack of	data.		
<u>Comp</u>	oonents:			
di-ter	t-butyl 3,3,5-trimethy	/lcyclo	hexylidene di	peroxide:
Speci Metho Resul	bd	:	Rabbit OECD Test Gu No skin irritatio	
Hydro	ocarbons, C4, 1,3-bu	tadien	e-free, polyme	rised., triisobutylene fraction, hydrogenated:
Resul	t	:	Repeated expo	osure may cause skin dryness or cracking.
Serio Based	us eye damage/eye i d on available data, th	irritatio	n	
Serio Based <u>Comp</u>	us eye damage/eye i d on available data, th conents:	i rritatic e class	n ification criteria	a are not met.
Serio Based <u>Comp</u>	us eye damage/eye i d on available data, th <u>conents:</u> t-butyl 3,3,5-trimethy	irritatic e class /lcyclo	n ification criteria	a are not met.
Serio Based <u>Comp</u> di-ter	us eye damage/eye i d on available data, the <u>conents:</u> t-butyl 3,3,5-trimethy es t	e class /lcyclo	n ification criteria hexylidene di	a are not met. peroxide:
Serio Based Comp di-ter Speci Resul Metho	us eye damage/eye i d on available data, the <u>conents:</u> t-butyl 3,3,5-trimethy es t od	rritatio e class /lcyclo : :	n ification criteria hexylidene di Rabbit No eye irritatio OECD Test Gu	a are not met. peroxide:
Serio Based Comp di-ter Speci Resul Metho	us eye damage/eye i d on available data, the <u>ponents:</u> t-butyl 3,3,5-trimethy es t bd pocarbons, C4, 1,3-bu	rritatic e class /lcyclo : : : tadien	n ification criteria hexylidene di Rabbit No eye irritatio OECD Test Gu	a are not met. peroxide: n uideline 405 erised., triisobutylene fraction, hydrogenated:
Serio Based Comp di-ter Speci Resul Metho Resul	us eye damage/eye i d on available data, the <u>ponents:</u> t-butyl 3,3,5-trimethy es t bd pocarbons, C4, 1,3-bu	rritatic e class /Icyclo : : tadien :	n ification criteria hexylidene di Rabbit No eye irritatio OECD Test Gu e-free, polyme No eye irritatio	a are not met. peroxide: n uideline 405 erised., triisobutylene fraction, hydrogenated:
Serio Based Comp di-ter Speci Resul Metho Resul Resul Resul	us eye damage/eye i d on available data, the <u>ponents:</u> t-butyl 3,3,5-trimethy es t bd pcarbons, C4, 1,3-bu t iratory or skin sensit	rritatic e class /lcyclo : tadien tisatior	n ification criteria hexylidene di Rabbit No eye irritatio OECD Test Gu e-free, polyme No eye irritatio	a are not met. peroxide: n uideline 405 erised., triisobutylene fraction, hydrogenated:
Serio Based Comp di-ter Speci Resul Metho Resul Resul Resul Skin s Not cl	us eye damage/eye i d on available data, the <u>conents:</u> t-butyl 3,3,5-trimethy es t bd carbons, C4, 1,3-bu t iratory or skin sensit sensitisation assified due to lack of	rritatic e class /lcyclo : tadien tisatior	n ification criteria hexylidene di Rabbit No eye irritatio OECD Test Gu e-free, polyme No eye irritatio	a are not met. peroxide: n uideline 405 erised., triisobutylene fraction, hydrogenated:
Serio Based Comp di-ter Speci Resul Metho Resul Resul Skin s Not cl Resp	us eye damage/eye i d on available data, the <u>conents:</u> t-butyl 3,3,5-trimethy es t bod carbons, C4, 1,3-bu t iratory or skin sensit sensitisation assified due to lack of iratory sensitisation	rritatic e class /lcyclo : tadien tisatior	n ification criteria hexylidene di Rabbit No eye irritatio OECD Test Gu e-free, polyme No eye irritatio	a are not met. peroxide: n uideline 405 erised., triisobutylene fraction, hydrogenated:
Serio Based Comp di-ter Speci Resul Metho Resul Resul Resul Skin Not cl Not cl	us eye damage/eye i d on available data, the <u>conents:</u> t-butyl 3,3,5-trimethy es t bd carbons, C4, 1,3-bu t iratory or skin sensit sensitisation assified due to lack of iratory sensitisation assified due to lack of	rritatic e class /lcyclo : tadien tisatior	n ification criteria hexylidene di Rabbit No eye irritatio OECD Test Gu e-free, polyme No eye irritatio	a are not met. peroxide: n uideline 405 erised., triisobutylene fraction, hydrogenated:
Serio Based Comp di-ter Speci Resul Metho Resul Resul Resul Skin s Not cl Resp Not cl Not cl	us eye damage/eye i d on available data, the <u>conents:</u> t-butyl 3,3,5-trimethy es t bod carbons, C4, 1,3-bu t iratory or skin sensit sensitisation assified due to lack of iratory sensitisation	rritatic e class /lcyclo : tadien tisation	n ification criteria hexylidene di Rabbit No eye irritatio OECD Test Gu e-free, polyme No eye irritatio	a are not met. peroxide: n uideline 405 prised., triisobutylene fraction, hydrogenated: n

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	/lethod Result	l		Guideline 406 use skin sensitisation.
		ell mutagenicity ssified due to lack of o	lata.	
<u>C</u>	Compo	onents:		
di	li-tert-	butyl 3,3,5-trimethyl	cyclohexylidene	diperoxide:
G	Genotoxicity in vitro			Chromosome aberration test in vitro CD Test Guideline 473 ative
				Bacterial reverse mutation assay (AMES) CD Test Guideline 471 ative
				n vitro mammalian cell gene mutation test CD Test Guideline 476 ative
G	Senoto	xicity in vivo	: Remarks: N	o data available
н	lvdror	arbons C4 1.3-but	diene-free poly	merised., triisobutylene fraction, hydrogenated:
G	-	ell mutagenicity -	: No known e	

Carcinogenicity

Not classified due to lack of data.

Components:

di-tert-butyl 3,3,5-trimethylcyclohexylidene diperoxide:

Species	:	Mouse
Application Route	:	Oral
Result	:	negative

Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated: Carcinogenicity - Assess- : No known effect. ment

Reproductive toxicity

Not classified due to lack of data.

Components:

di-tert-butyl 3,3,5-trimethylcyclohexylidene diperoxide:

Effects on fertility : Remarks: No data available



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Effect ment	ts on foetal develop-	General Toxicity	te: oral (gavage) / Maternal: NOAEL: 1,000 mg/kg body weight Test Guideline 414
Hydro	ocarbons, C4, 1,3-bu	tadiene-free, polymer	ised., triisobutylene fraction, hydrogenated
Repro	oductive toxicity - As- nent	: No known effec	t.
STOT	- single exposure		
Not c	lassified due to lack of	data.	
STOT	- repeated exposure	9	
May o	cause damage to orga	ns through prolonged o	r repeated exposure.
Aspir	ation toxicity		
May b	be fatal if swallowed an	nd enters airways.	
<u>Com</u>	oonents:		
	ocarbons, C4, 1,3-bu be fatal if swallowed ar		ised., triisobutylene fraction, hydrogenated
Furth	er information		
Prod	uct:		
Rema	arks	: Solvents may de	egrease the skin.
Com	oonents:		
	ocarbons, C4, 1,3-bu	tadiene-free, polymer	ised., triisobutylene fraction, hydrogenated
Hydro			

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

di-tert-butyl 3,3,5-trimethylcyclohexylidene diperoxide:

Toxicity to fish	:	LC50 (Brachydanio rerio (zebrafish)): > 0.043 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 Remarks: No toxicity at the limit of solubility
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 1 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 Remarks: No toxicity at the limit of solubility



rsion)	Revision Date: 2024/09/12		OS Number: 0000000196	Date of last issue: 2021/03/26 Date of first issue: 2017/05/04	
Toxici plants	ity to algae/aquatic	:	mg/l Exposure time: Method: OECD	tirchneriella subcapitata (green algae)): 0.11 72 h Test Guideline 201 xicity at the limit of solubility	
	ty to daphnia and other ic invertebrates (Chron- city)	other : NOEC (Daphnia magna (Water flea)): 0.0128 mg/l			
Toxicity to microorganisms			EC50 (Bacteria): > 1,000 mg/l Exposure time: 3 h Method: OECD Test Guideline 209		
Ecoto	oxicology Assessment				
	hic aquatic toxicity	:	May cause long	lasting harmful effects to aquatic life.	
Toxici aquat	ty to daphnia and other ic invertebrates ty to algae/aquatic		EC50 (Daphnia Exposure time: Remarks: Inforr similar substand IC50 (algae): > Exposure time:	nation given is based on data obtained from ces. 0.04 mg/l 72 h nation given is based on data obtained from	
	xicology Assessment aquatic toxicity		This product ha	s no known ecotoxicological effects.	
	hic aquatic toxicity	:	·	lasting harmful effects to aquatic life.	
		•			
	stence and degradabi	ity			
<u>Comp</u>	oonents:				
	t-butyl 3,3,5-trimethyl o gradability	ycl :	Result: Biodegr		
Hydro	ocarbons C4 1 3-buta	dia	a frag nalymay	ised., triisobutylene fraction, hydrogenated:	



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Bioa	ccumulative potentia	I		
Com	ponents:			
	rt-butyl 3,3,5-trimethy ccumulation	vicycia :	•	peroxide: on factor (BCF): 443
	ion coefficient: n- iol/water	:	log Pow: 6.53	
Partit	ocarbons, C4, 1,3-bu ion coefficient: n- ol/water	tadier :	log Pow: 5.94	erised., triisobutylene fraction, hydrogenated - 6.16 (20 °C) value is calculated
	lity in soil ata available			
Othe	r adverse effects			
Prod Addit matic	ional ecological infor-	:	unprofessiona	ntal hazard cannot be excluded in the event of I handling or disposal. g lasting harmful effects to aquatic life.
13. DISPO	OSAL CONSIDERATION	ONS		
Disp	osal methods			
•	e from residues	:	The product sl courses or the	inate ponds, waterways or ditches with chemi-
Conta	aminated packaging	:	Clean containe Dispose of cor plant. Empty remaine Dispose of as Do not re-use	ntents/ container to an approved waste disposal

14. TRANSPORT INFORMATION

International Regulations

UNRTDG
UN number

: UN 3103

according to GB/T 16483 and GB/T 17519



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Clas Pac Lab	king group els	:		,
Env	rironmentally hazardous	:	no	
UN/ Pro Clas Pac Lab Pac airc Pac	king group		5.2 Not assigned by r	lperoxy)-3,3,5-trimethylcyclohexane)
UN Pro Clas Pac Lab Em	king group			,

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

GB 6944/12268

UN number Proper shipping name	:	UN 3103 ORGANIC PEROXIDE TYPE C, LIQUID (1,1-DI-(tert-BUTYLPEROXY)-3,3,5- TRIMETHYLCYCLOHEXANE)
Class Packing group Labels Marine pollutant	:	5.2 Not assigned by regulation 5.2 no

Special precautions for user

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.

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15. REGULATORY INFORMATION

National regulatory information Gefahrgruppe nach TRGS 741: lb, S+ (German regulatory requirements) Produkt unterliegt dem Sprengstoffgesetz (SprengG; Stoffgruppe C). (German regulatory requirements)					
Regulations on Safety Ma Catalogue of Hazardous Ch	nagement of Hazardous Chemicals emicals : Listed				
Identification of Major Haza No. / Code Chemical W7.2 Organic p	rd Installations for Hazardous Chemicals (GB 18218) name / Category Threshold quantity				
Regulations on Labour Pr	otection in Workplaces where Toxic Substances are Used				
Catalogue of Highly Toxic C	hemicals : Not listed				
Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals China Severely Restricted Toxic Chemicals for Import Not listed and Export Regulation on the Administration of Precursor Chemicals Catalogue and Classification of Precursor Chemicals Not listed					
The components of this p TCSI (TW)	roduct are reported in the following inventories: : 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				
PICCS (PH)	: On the inventory, or in compliance with the inventory				
IECSC (CN)	: On the inventory, or in compliance with the inventory				
TECI (TH)	: On the inventory, or in compliance with the inventory				

16. OTHER INFORMATION

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: 2024/09/12



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Furth	ner information			
Othe	r information	:	safety and does r uct specification. These safety inst may still contain p	neet only contains information relating to ot replace any product information or prod- ructions also apply to empty packaging which product residues. ne label also apply to residues in the con-
	ces of key data used to bile the Safety Data t	:		data, data from raw material SDSs, OECD arch results and European Chemicals Agen- ropa.eu/
Date	format	:	yyyy/mm/dd	

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ERG - Emergency Response Guide; 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; 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 Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System



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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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