according to the OSHA Hazard Communication Standard



BENOX[®]L-40LV

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SECTION 1. IDENTIFICATION

Trade name	:	BENOX [®] L-40LV			
Manufacturer or supplier's c	deta	iils			
Company name of supplier	:	United Initiators, Inc.			
Address	:	555 Garden Street Elyria OH 44035 USA			
Telephone	:	+1-440-323-3112			
Telefax	:	+1-440-323-2659			
Emergency telephone	:	CHEMTREC US (24h): CHEMTREC WORLD (24h):	+1-800-424-9300 +1-703-527-3887		
E-mail address of person responsible for the SDS	:	cs-initiators.nafta@united-in.com			
Recommended use of the chemical and restrictions on use					
Recommended use	:	Curing chemical			

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Organic peroxides	:	Туре Е
Eye irritation	:	Category 2B
Skin sensitization	:	Category 1
Short-term (acute) aquatic hazard	:	Category 1
Long-term (chronic) aquatic hazard	:	Category 1
GHS label elements Hazard pictograms	:	

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Signal	Word	: Warning				
Hazard Statements		H317 May c H320 Cause	H242 Heating may cause a fire.H317 May cause an allergic skin reaction.H320 Causes eye irritation.H410 Very toxic to aquatic life with long lasting effects.			
Precautionary Statements		No smoking P220 Keep/ heavy metal materials. P234 Keep of P261 Avoid P264 Wash P272 Contar the workplac P273 Avoid	away from heat/ sparks/ open flames/ hot surfaces. Store away from clothing/ strong acids, bases, salts and other reducing substances /combustible only in original container. breathing mist or vapors. skin thoroughly after handling. minated work clothing must not be allowed out of			
		P305 + P35 ⁻ for several n to do. Contir P333 + P310 attention. P337 + P310 tion.	3 If skin irritation or rash occurs: Get medical advice 3 If eye irritation persists: Get medical advice/ atten- contaminated clothing before reuse.			
		P411 + P235 86 °F. Keep				
		Disposal:	se of contents/ container to an approved waste dis-			

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

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Chemical nature

: Organic Peroxide Liquid mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Dibenzoyl peroxide	94-36-0	> 36 - < 42
Zinc stearate	557-05-1	>= 1 - < 5

Actual concentration is withheld as a trade secret

SECTION 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 material safety data sheet to the doctor in attendance. Do not leave the victim unattended.
lf inhaled	:	Administer oxygen if breathing is difficult or cyanosis is observed. 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. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.





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lf s	If swallowed		:	Call a physician immediately. Keep respiratory tract clear. If symptoms persist, call a physician.		
an		nportant symptoms acts, both acute and I	:	May cause an alle Causes eye irritati sensitizing effects		
Pr	otecti	ion of first-aiders	:		rs should pay attention to self-protection nmended protective clothing	
No	otes t	o physician	:	Treat symptomation	cally and supportively.	
SECTIO	ON 5.	. FIRE-FIGHTING ME	ASU	RES		
Su	uitable	e extinguishing media	:	Water spray jet Alcohol-resistant f Carbon dioxide (C Dry chemical		
	nsuita edia	ble extinguishing	:	: High volume water jet		
	Specific hazards during fire fighting		:	Possible emission lead to a dangerou Avoid confinement Contact with incor temperatures exce	npatible materials or exposure to eeding SADT may result in a self- mposition reaction with release of flammable	
				The product burns violently. Flash back possible over considerable distance. Do not allow run-off from fire fighting to enter drains or wat courses. Vapors may form explosive mixtures with air. The product will float on water and can be reignited on surf water. Cool closed containers exposed to fire with water spray.		
Sp od		extinguishing meth-	:	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 d so. Use water spray to cool unopened containers.		
Fu	ırther	information	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use a water spray to cool fully closed containers.		

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•	ial protective equipment e-fighters	must not be di Fire residues a be disposed o : Wear self-cont necessary.	ninated fire extinguishing water separately. This ischarged into drains. and contaminated fire extinguishing water must f in accordance with local regulations. tained breathing apparatus for firefighting if protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Follow safe handling advice and personal protective equipment recommendations. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Use personal protective equipment. Remove all sources of ignition. Never return spills in original containers for re-use. Treat recovered material as described in the section "Disposal considerations".
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 decomposition at or below SADT. Clear spills immediately. Suppress (knock down) gases/vapors/mists with a water spray jet. To clean the floor and all objects contaminated by this material, 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 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.

SECTION 7. HANDLING AND STORAGE

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 vapors). Keep away from heat and sources of ignition.





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			Keep away from o ignition.	on-proof equipment. open flames, hot surfaces and sources of combustible material.	
A	Advice on safe handling		 Open drum carefully as content may be under pressure. Protect from contamination. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid formation of aerosol. Take precautionary measures against static discharges. Never return any product to the container from which it wa originally removed. Provide sufficient air exchange and/or exhaust in work root Avoid confinement. Keep away from heat, hot surfaces, sparks, open flames 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. Persons susceptible to skin sensitization problems or ast allergies, chronic or recurrent respiratory disease should be employed in any process in which this mixture is being used. 		
С	onditions for safe storage	:	Store in cool plac Keep in a well-ver Contamination m closed containers Observe label pre Store in accordan Avoid impurities (Electrical installat the technological	tightly closed in a cool, well-ventilated place. e. ntilated place. ay result in dangerous pressure increases - may rupture. ecautions. ice with the particular national regulations. e.g. rust, dust, ash), risk of decomposition. ions / working materials must comply with safety standards. are opened must be carefully resealed and	
Ν	laterials to avoid	:		combustible materials. strong acids, bases, heavy metal salts and bstances.	
	ecommended storage tem- erature	:	0 - 30 °C		
			32 - 86 °F		
	urther information on stor- ge stability	:	Stable under reco	mmended storage conditions.	

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type	Control parame-	Basis
		(Form of	ters / Permissible	
		exposure)	concentration	
Dibenzoyl peroxide	94-36-0	TWA	5 mg/m3	ACGIH
		TWA	5 mg/m3	NIOSH REL
		TWA	5 mg/m3	OSHA Z-1
		TWA	5 mg/m3	OSHA P0
Zinc stearate	557-05-1	TWA (Res-	5 mg/m3	NIOSH REL
		pirable)		
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (total	15 mg/m3	OSHA Z-1
		dust)		
		TWA (respir-	5 mg/m3	OSHA Z-1
		able fraction)		
		TWA (Total	10 mg/m3	OSHA P0
		dust)		
		TWA (respir-	5 mg/m3	OSHA P0
		able dust		
		fraction)		
		TWA (Inhal-	10 mg/m3	ACGIH
		able particu-		
		late matter)		
		TWA (Res-	3 mg/m3	ACGIH
		pirable par-		
		ticulate mat-		
		ter)		

Engineering measures

Minimize workplace exposure concentrations.

Personal	protective	equipment	
Despirate	m , protoction		ь.

:

Respiratory protection	:	In the case of dust or aerosol formation use respirator with an approved filter.
Filter type	:	ABEK-filter
		Use NIOSH approved respiratory protection.
Hand protection		
Material	:	butyl-rubber
Break through time	:	480 min
Glove thickness	:	0.47 mm





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	Material Break through time Glove thickness	: 480	rile rubber) min mm	
	Remarks	sta ma pro che haz Fo res glo	ndard values! T terial has to be tective glove. (emicals depend cardous substa or special applic istance to chen ves with the glo	eak through time/strength of material are The exact break through time/strength of obtained from the producer of the Choose gloves to protect hands against ing on the concentration and quantity of the nce and specific to place of work. eations, we recommend clarifying the nicals of the aforementioned protective ove manufacturer. Wash hands before end of workday.
Eye	e protection	to t Ple sel Alw eye Tig Ple	he workstation ase follow all a ecting protective vays wear eye contact with the htly fitting safet ase wear suita	pplicable local/national requirements when e measures for a specific workplace. protection when the potential for inadvertent ne product cannot be excluded.
Ski	n and body protection	res pot tas dis We	istance data ar ential. ditional body ga k being perform posable suits) t ear as appropria	protective clothing based on chemical and an assessment of the local exposure arments should be used based upon the hed (e.g., sleevelets, apron, gauntlets, to avoid exposed skin surfaces. te: ntistatic protective clothing.
Pro	tective measures	to t		tive equipment must be selected according on and amount of the dangerous substance kplace.
Hyg	jiene measures	Kee Wh Wh Wa	ep away from fo len using do no len using do no	t eat or drink.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Emulsion
Color	:	white
Odor	:	characteristic
Odor Threshold	:	No data available
рН	:	not determined substance/mixture is non-soluble (in water)
Melting point/range	:	No data available
Boiling point/boiling range	:	Decomposition: Decomposes below the boiling point.
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	Organic peroxide
Flammability (liquids)	:	Organic peroxide
Self-ignition	:	The substance or mixture is not classified as pyrophoric.
Upper explosion limit / Upper flammability limit	:	Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Vapor pressure	:	not determined
Relative density	:	not determined
Density	:	1.2 g/cm3 (25 °C)
Solubility(ies) Water solubility	:	insoluble
Partition coefficient: n- octanol/water	:	Not applicable
Autoignition temperature	:	not determined

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	Self-Accelerating decomposi- tion temperature (SADT)	:	temperature at w	H.4 erating Decomposition Temperature. Lowest hich the tested package size will undergo a decomposition reaction.
	Viscosity Viscosity, dynamic	:	not determined	
	Viscosity, kinematic	:	not determined	
	Explosive properties	:	Not explosive	
	Oxidizing properties	:	The substance of Organic peroxide	r mixture is not classified as oxidizing.
;	Self-heating substances	:	The substance of	r mixture is not classified as self heating.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable under recommended storage conditions. Heating may cause a fire or explosion.
Chemical stability	:	Stable under recommended storage conditions. No decomposition if stored normally.
Possibility of hazardous reac- tions	:	Vapors may form explosive mixture with air.
Conditions to avoid	:	Protect from contamination. Contact with incompatible substances can cause decomposition at or below SADT. Heat, flames and sparks. Avoid confinement.
Incompatible materials	:	Accelerators, strong acids and bases, heavy metals and heavy metal salts, reducing agents
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

Acute toxicity Not classified due to lack of data	a.	
Components:		
Dibenzoyl peroxide: 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
Acute inhalation toxicity :	:	LC50 (Rat): > 24.3 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Assessment: The substance or mixture has no acute inhala- tion toxicity
Acute dermal toxicity :	:	Remarks: No data available
Zinc stearate:		
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
Acute inhalation toxicity :	:	LC50 (Rat): > 200 mg/l Exposure time: 1 h Test atmosphere: dust/mist
Acute dermal toxicity :	:	LD50 (Rabbit): > 2,000 mg/kg Assessment: The substance or mixture has no acute dermal toxicity
Skin corrosion/irritation Not classified due to lack of data	a.	
Product: Remarks :	:	May cause skin irritation in susceptible persons.
Components:		
Dibenzoyl peroxide: Species : Result :	:	Rabbit No skin irritation
Zinc stearate:		

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Specie Metho	d	:	Rabbit Draize Test	
Result	i i	:	No skin irritation	
	us eye damage/eye es eye irritation.	e irritati	ion	
<u>Produ</u>	-			
Rema	rks	:	Vapors may cause and the skin.	se irritation to the eyes, respiratory system
Rema	rks	:	Vapors may cause and the skin.	se irritation to the eyes, respiratory system
<u>Comp</u>	onents:			
Diben	zoyl peroxide:			
Specie		:	Rabbit	
Result	t	:	Irritation to eyes,	reversing within 7 days
Zinc s	stearate:			
Specie		:	Rabbit	
Result Metho		:	No eye irritation Draize Test	
Respi	ratory or skin sens	itizatio	n	
	ensitization	reactio	'n	
May c	ause an allergic skir		on.	
May c Respi		1	n.	
May c Respi Not cla <u>Produ</u>	ause an allergic skir ratory sensitization assified due to lack o <u>Ict:</u>	1		
May c Respi Not cla	ause an allergic skir ratory sensitization assified due to lack o <u>Ict:</u>	1	on. Causes sensitiza	ation.
May c Respi Not cla <u>Produ</u> Rema	ause an allergic skir ratory sensitization assified due to lack o <u>Ict:</u>	1		ation.
May c Respi Not cla <u>Produ</u> Remai	ause an allergic skir ratory sensitization assified due to lack o <u>let:</u> rks	1		ation.
May c Respi Not cla Produ Reman Comp Diben Routes	ause an allergic skir ratory sensitization assified due to lack o <u>act:</u> rks ponents: zoyl peroxide: s of exposure	1	Causes sensitiza Skin contact	ation.
May c Respi Not cla Produ Reman Comp Diben Routes Specie	ause an allergic skir ratory sensitization assified due to lack o <u>act:</u> rks ponents: azoyl peroxide: s of exposure es	1	Causes sensitiza Skin contact Mouse	
May c Respi Not cla Produ Reman Comp Diben Routes	ause an allergic skir ratory sensitization assified due to lack o <u>lect:</u> rks conents: Izoyl peroxide: s of exposure es d	1	Causes sensitiza Skin contact Mouse Local lymph node	
May c Respi Not cla Produ Reman Reman Diben Routes Specie Metho Result	ause an allergic skir ratory sensitization assified due to lack o <u>lect:</u> rks conents: Izoyl peroxide: s of exposure es d	1	Causes sensitiza Skin contact Mouse Local lymph node	e assay (LLNA)
May c Respi Not cla Produ Remai Remai Comp Diben Routes Specie Metho Result	ause an allergic skir ratory sensitization assified due to lack o <u>lot:</u> rks conents: azoyl peroxide: s of exposure es d t stearate:	1	Causes sensitiza Skin contact Mouse Local lymph node	e assay (LLNA)
May c Respi Not cla Produ Remai Remai Comp Diben Routes Specie Metho Result	ause an allergic skir ratory sensitization assified due to lack o <u>lot:</u> rks ponents: azoyl peroxide: s of exposure es d t stearate: s of exposure es	1	Causes sensitiza Skin contact Mouse Local lymph nod May cause sensi	e assay (LLNA) itization by skin contact.

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Resul Rema		:		e skin sensitization. en is based on data obtained from similar sub-	
	cell mutagenicity lassified due to lack o	of data.			
<u>Com</u>	oonents:				
	nzoyl peroxide: toxicity in vitro	:	Method: OECD Result: negative	9 Test Guideline 471 e	
			Method: OECD Result: negative	e Test Guideline 476	
Geno	toxicity in vivo	:	Test Type: don Species: Mous Result: negative		
Zinc	stearate:				
Geno	toxicity in vitro	:	Result: negative	mation given is based on data obtained from	
Geno	toxicity in vivo	:	Test Type: Chr Species: Rat Result: Equivoo	omosomal aberration	
	nogenicity lassified due to lack o	of data.			
<u>Com</u>	oonents:				
Diber Rema	n zoyl peroxide: urks	:	This information	n is not available.	
IARC				ent at levels greater than or equal to 0.1% is confirmed human carcinogen by IARC.	
OSH			this product pre- regulated carcin	sent at levels greater than or equal to 0.1% is logens.	
NTP	No ingredi	No ingredient of this product present at levels greater than or equal to 0.1% is			

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified due to lack of data.





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<u>Com</u> p	oonents:			
	nzoyl peroxide: s on fertility	:	Method: OECD T Species: Rat, fen	e: Oral Parent: NOAEL: 1,000 mg/kg body weight Fest Guideline 422 nale
			•	e: Oral Parent: NOAEL: 500 mg/kg body weight Fest Guideline 422
Repro sessr	ductive toxicity-As- nent	:		dverse effects on sexual function and fertility nt, based on animal experiments.
Zinc	stearate:			
Effect	s on fertility	:	Application Route General Toxicity Method: OECD T	e: oral (gavage) F1: NOAEL: 7.5 mg/kg body weight fest Guideline 416 on data from similar materials
Effect	s on fetal development	:	Teratogenicity: N	e: oral (gavage) Maternal: NOAEL: 30 mg/kg body weight IOAEL: 30 mg/kg body weight on data from similar materials
	-single exposure assified due to lack of d	ata		
	oonents:	ala.		
Route	nzoyl peroxide: as of exposure asment	:	Ingestion The substance o organ toxicant, s	r mixture is not classified as specific target ingle exposure.
	-repeated exposure assified due to lack of d	ata.		
	oonents:			
-	zoyl peroxide:			
Route	s of exposure ssment	:		r mixture is not classified as specific target epeated exposure.

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Repeated dose toxicity

Components:

Dibenzoyl peroxide:

Species NOAEL Application Route Exposure time Method	:	Rat 1,000 mg/kg Oral 28 d OECD Test Guideline 422
Zinc stearate:		
Species	:	Mouse
NOAEL	:	458 mg/kg
Application Route	:	Oral
Method	•	OECD Test Guideline 408
Aspiration toxicity		
Not classified due to lack of da	ata.	
Components:		
Dibenzoyl peroxide:		
No aspiration toxicity classific	atio	n
Further information		

Product:

Remarks

: No data available

Components:

Zinc stearate:		
Remarks	:	No

: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity		
Product:		
Ecotoxicology Assessment Acute aquatic toxicity	:	Very toxic to aquatic life.
Chronic aquatic toxicity		Very toxic to aquatic life with long lasting effects.

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<u>(</u>	<u>Compo</u>	onents:			
	Dibenz	oyl peroxide:			
		/ to fish	:	Exposure time: 9	chus mykiss (rainbow trout)): 0.06 mg/l 96 h Fest Guideline 203
		/ to daphnia and other invertebrates	:	Exposure time: 4	magna (Water flea)): 0.11 mg/l ł8 h Fest Guideline 202
	Toxicity plants	/ to algae/aquatic	:	mg/l Exposure time: 7	rchneriella subcapitata (green algae)): 0.071 72 h Fest Guideline 201
				mg/l Exposure time: 7	irchneriella subcapitata (green algae)): 0.02 72 h Fest Guideline 201
	M-Fact icity)	or (Acute aquatic tox-	:	10	
ä		/ to daphnia and other invertebrates (Chron- ity)	:	Exposure time: 2 Test Type: semi-	
	M-Fact toxicity	or (Chronic aquatic)	:	10	
	Toxicity	/ to microorganisms	:	EC50 (Bacteria): Exposure time: 3 Method: OECD 7	
	Ecotox	icology Assessment			
		aquatic toxicity	:	Very toxic to aqu	atic life.
(Chronic	aquatic toxicity	:	Very toxic to aqu	atic life with long lasting effects.
	Zinc st	earate:			
		/ to fish	:	Exposure time: 9	o (zebra fish)): > 10,000 mg/l 96 h e 67/548/EEC, Annex V, C.1.
	-	/ to daphnia and other invertebrates	:	Exposure time: 4	nagna (Water flea)): > 100 mg/l 48 h Fost Guideline 202

Method: OECD Test Guideline 202





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	Toxicity plants	to algae/aquatic	:	EL50 (Pseudokirc mg/l Exposure time: 72 Method: OECD Te	
	Toxicity	to microorganisms	:	NOEC (Pseudomo Exposure time: 0. Method: DIN 38 4	
	Persiste	ence and degradabil	ity		
	<u>Compo</u>	nents:			
	Dibenz	oyl peroxide:			
	Biodegr	adability	:	Result: Biodegrada Method: OECD Te	able est Guideline 301D
	Zinc ste	earate:			
	Biodegr	adability	:	Result: Readily bio Method: OECD Te	odegradable. est Guideline 301D
	Bioacc	umulative potential			
	<u>Compo</u>	nents:			
	Dibenz	oyl peroxide:			
	Partitior octanol/	n coefficient: n- /water	:	log Pow: 3.2 (20 °	C / 20 °C)
	Zinc ste	earate:			
		n coefficient: n- /water	:	Remarks: No data	a available
		y in soil a available			
	Other a	dverse effects			
	<u>Produc</u>	<u>t:</u>			
	Ozone-I	Depletion Potential	:	tection of Stratosp Substances Remarks: This pro tured with a Class	R Protection of Environment; Part 82 Pro- oheric Ozone - CAA Section 602 Class I oduct neither contains, nor was manufac- I or Class II ODS as defined by the U.S. tion 602 (40 CFR 82, Subpt. A, App.A + B).
	Additior mation	nal ecological infor-	:	unprofessional ha	hazard cannot be excluded in the event of ndling or disposal. tic life with long lasting effects.

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Components:

Zinc stearate:

Additional ecological infor- : No data available mation

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	 Dispose of wastes in an approved waste disposal facility. The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container.
Contaminated packaging	 Dispose of in accordance with local regulations. Clean container with water. Dispose of contents/ container to an approved waste disposal plant. Empty remaining contents. 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

International Regulations

UNRTDG		
UN number	:	UN 3107
Proper shipping name	:	ORGANIC PEROXIDE TYPE E, LIQUID (DIBENZOYL PEROXIDE)
Class	:	5.2
Packing group	:	Not assigned by regulation
Labels	:	5.2
Environmentally hazardous	:	yes
IATA-DGR		
UN/ID No.	:	UN 3107
Proper shipping name	:	Organic peroxide type E, liquid (Dibenzoyl peroxide)
Class	:	5.2
Packing group	:	Not assigned by regulation
Labels	:	Organic Peroxides, Keep Away From Heat
Packing instruction (cargo aircraft)	:	570
Packing instruction (passen- ger aircraft)	:	570

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IMDG-Code

UN number	: UN 3107
Proper shipping name	: ORGANIC PEROXIDE TYPE E, LIQUID (DIBENZOYL PEROXIDE)
Class	: 5.2
Packing group	: Not assigned by regulation
Labels	: 5.2
EmS Code	: F-J, S-R
Marine pollutant	: ves

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

Not applicable for product as supplied.

Domestic regulation

49 CFR UN/ID/NA number Proper shipping name	-	UN 3107 Organic peroxide type E, liquid (Dibenzoyl peroxide, <=42%)
Class	:	5.2
Packing group	:	Not assigned by regulation
Labels	:	ORGANIC PEROXIDE
ERG Code	:	145
Marine pollutant	:	yes

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.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	Organic peroxides Respiratory or skin sensitization Serious eye damage or eye irritation
SARA 313	:	The following components are subject to reporting levels established by SARA Title III, Section 313:

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		Dibenzoyl perox- ide	94-36-0

Zinc stearate

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

557-05-1

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307

Zinc stearate 557-05-1

This product does not contain any priority pollutants related to the U.S. Clean Water Act

International Regulations

Gefahrgruppe nach TRGS 741: II (German regulatory requirements)

The ingredients 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
IECSC (CN)	:	On the inventory, or in compliance with the inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

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SECTION 16. OTHER INFORMATION

Further information

This material safety datasheet only contains information relating to safety and does not replace any product information or product 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 container.

Sources of key data used to	:	Internal technical data, data from raw material SDSs, OECD
compile the Material Safety Data Sheet		eChem Portal search results and European Chemicals Agen- cy, http://echa.europa.eu/

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Full text of other abbreviations

ACGIH NIOSH REL OSHA P0	:	USA. ACGIH Threshold Limit Values (TLV) USA. NIOSH Recommended Exposure Limits USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim- its for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
OSHA P0/TWA	:	8-hour time weighted average
OSHA Z-1 / TWA	:	8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; 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; HMIS - Hazardous Materials Identification System; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of

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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; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; 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

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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