

# MATERIAL SAFETY DATA SHEET

## 1. Identification of the substance/mixture and of the company/undertaking

## 1.1 Product identifier

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

Use of the Substance/Mixture	: Manufacture of plastics products Polymer additive Stabilizer

# 1.3 Details of the supplier of the safety data sheet

Company	: PARKELAK KİMYA SAN. VE TİC.AŞ Unalan Mah. Libadiye Sok.Emaar Square Sitesi No:82/E D:1212 34700 Üsküdar-İstanbul-TÜRKİYE
Phone/Fax:	00 90 216 912 14 30 / 00 90 216 515 47 65
E-mail address	: info@parkelak.com.tr

## 2. Hazards identification

## 2.1 Classification of the substance or mixture

## Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 Eye irritation, Category 2 Reproductive toxicity, Category 2 Specific target organ toxicity - single exposure, Category 3, Central nervous	H226: Flammable liquid and vapour. H319: Causes serious eye irritation. H361d: Suspected of damaging the unborn child. H336: May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure, Category 1 Aspiration hazard, Category 1	H372: Causes damage to organs through prolonged or repeated exposure. H304: May be fatal if swallowed and enters airways.

H411: Toxic to aquatic life with long lasting effects.

Chronic aquatic toxicity, Category 2

## 2.2 Label elements

# Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms





Signal word :	Danger	
Hazard statements :	H226 H304	Flammable liquid and vapour. May be fatal if swallowed and enters ainways
	H319	Causes serious eye irritation.
	H336	May cause drowsiness or dizziness.
	H361d	Suspected of damaging the unborn child.
	H372	Causes damage to organs through
		prolonged or repeated exposure.
	H411	Toxic to aquatic life with long lasting effects.
Precautionary statements :	Prevention:	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
	P281	Use personal protective equipment as required.
	Response:	- 1
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
	P331	Do NOT induce vomiting.
	P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Hazardous components which must be listed on the label: 136-53-8 Zinc bis(2-ethylhexanoate) Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

## Additional Labelling:

EUH066 Repeated exposure may cause skin dryness or cracking.

#### 2.3 Other hazards

Combustible material

## 3. Composition/information on ingredients

#### 3.2 Mixtures

Chemical nature

: Mixture

Contains organic solvents.

### Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Zinc bis(2-ethylhexanoate)	136-53-8 205-251-1	Eye Irrit. 2; H319 Repr. 2; H361d	>= 25



	01-2119979071-36- 0002	Aquatic Chronic 3; H412	
Hydrocarbons, C9-C12, n- alkanes, isoalkanes, cyclics, aromatics (2-25%)	919-446-0 01-2119458049-33- xxxx	Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H336 STOT RE 1; H372 Aquatic Chronic 2; H411	>= 25
2-(2-Butoxyethoxy) ethanole	112-34-5 203-961-6 01-2119475104-44- xxxx	Eye Irrit. 2; H319	< 10

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 4. First aid measures

## 4.1 Description of first aid measures

General advice	: Remove and wash contaminated clothing before re-use.	
If inhaled	: Move to fresh air.	
In case of skin contact	: Wash off with soap and plenty of water. Take off contaminated clothing and shoes immediately.	
In case of eye contact	: Rinse with plenty of water.	
If swallowed	: Get medical advice/ attention if you feel unwell. Show this safety data sheet to the doctor in attendance.	
Most important symptoms and effects, both acute and delayed		
Symptoms	: No information available.	
Indication of any immediate medical attention and special treatment needed		
Treatment	: Treat symptomatically.	

# 5. Firefighting measures

4.2

4.3

## 5.1 Extinguishing media

Suitable extinguishing media	: Water spray Foam Carbon dioxide (CO2) Dry chemical Sand
Unsuitable extinguishing media	: High volume water jet



#### 5.2 Special hazards arising from the substance or mixture

Specific hazards during : Smoke and fumes, toxic. firefighting

#### 5.3 Advice for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus. for firefighters

#### 6. Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	<ul> <li>Remove all sources of ignition.</li> <li>Ensure adequate ventilation.</li> <li>Avoid contact with skin and eyes.</li> <li>Use personal protective equipment.</li> </ul>
6.2 Environmental precautions	
Environmental precautions	: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.
6.3 Methods and materials for co	ontainment and cleaning up
Methods for cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

#### 6.4 Reference to other sections

For personal protection see section 8.

## 7. Handling and storage

#### 7.1 Precautions for safe handling

Advice on safe handling	: Take precautionary measures against static discharges.	
	Keep away from sources of ignition - No smoking.	
	Provide sufficient air exchange and/or exhaust in work rooms.	

Keep in suitable, closed containers for disposal.

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	<ul> <li>Store at room temperature in the original container. Keep container tightly closed in a dry and well-ventilated place.</li> </ul>
Further information on storage conditions	: Observe storage regulations and explosion protection for flammable liquids.
German storage class	: 3 Flammable liquids

## 7.3 Specific end use(s)



: Consult the technical guidelines for the use of this substance/mixture.

## 8. Exposure controls/personal protection

## 8.1 Control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
2-(2- Butoxyethoxy) ethanole	112-34-5	air 8 h	10 ml/m3 67 mg/m3		Germany (MAK)

DNEL

Zinc bis(2-ethylhexanoate)

: End Use: Workers Exposure routes: Inhalation Potential health effects: Repeated or prolonged exposure, Systemic effects Value: 26,32 mg/m3

End Use: Workers Exposure routes: Skin contact



	Potential health effects: Repeated or prolonged exposure, Systemic effects Value: 6,1 mg/kg bw/day
Hydrocarbons, C9-C12, n- alkanes, isoalkanes, cyclics, aromatics (2-25%)	<ul> <li>End Use: Workers</li> <li>Exposure routes: Skin contact</li> <li>Potential health effects: Repeated or prolonged exposure,</li> <li>Systemic effects</li> <li>Value: 44 mg/kg bw/day</li> </ul>
	End Use: Workers Exposure routes: Inhalation Potential health effects: Repeated or prolonged exposure, Systemic effects Value: 330 mg/m3
2-(2-Butoxyethoxy) ethanole	<ul> <li>End Use: Workers</li> <li>Exposure routes: Inhalation</li> <li>Potential health effects: Repeated or prolonged exposure,</li> <li>Systemic effects</li> <li>Value: 67,5 mg/m3</li> </ul>
	End Use: Workers Exposure routes: Inhalation Potential health effects: Repeated or prolonged exposure, Local effects Value: 67,5 mg/m3
	End Use: Workers Exposure routes: Inhalation Potential health effects: Acute / short-term exposure, Local effects Value: 101,2 mg/m3
	End Use: Workers Exposure routes: Skin contact Potential health effects: Repeated or prolonged exposure, Systemic effects Value: 83 mg/kg bw/day
PNEC Zinc bis(2-ethylhexanoate)	: Fresh water Value: 20,6 μg Zn/L
	Marine water Value: 6,1 μg Zn/L
	Microbiological Activity in Sewage Treatment Systems Value: 52 µg Zn/L
	Fresh water sediment

aromatics (2-25%)



Value: 117,8 mg Zn/kg d.w. Marine sediment Value: 56,5 mg Zn/kg d.w. Soil Value: 35,6 mg Zn/kg d.w. Fresh water Value: 0,36 mg carboxylic acid moiety/L Marine water Value: 0,036 mg carboxylic acid moiety/L water intermittent release Value: 0,493 mg carboxylic acid moiety/L Microbiological Activity in Sewage Treatment Systems Value: 71,7 mg carboxylic acid moiety/L Fresh water sediment Value: 6,37 mg carboxylic acid moiety/kg d.w. Marine sediment Value: 0,637 mg carboxylic acid moiety/kg d.w. Soil Value: 1,06 mg carboxylic acid moiety/kg d.w. Hydrocarbons, C9-C12, n-: not determined alkanes, isoalkanes, cyclics, 2-(2-Butoxyethoxy) ethanole : Fresh water Value: 1,1 mg/l Marine water Value: 0,11 mg/l water intermittent release Value: 11 mg/l Microbiological Activity in Sewage Treatment Systems Value: 200 mg/l Fresh water sediment Value: 4,4 mg/kg d.w. Marine sediment Value: 0,44 mg/kg d.w. Soil Value: 0,32 mg/kg d.w.



Secondary Poisoning Value: 56 mg/kg food

8.2 I	Exposure controls	
	Engineering measures	
	Local exhaust	
	Personal protective equipmer	nt
	Respiratory protection	: In case of inadequate ventilation wear respiratory protection. Protective mask against solvent vapours (A2 Filter)
	Hand protection	: protective gloves acc. to EN 374, e.g. neoprene Glove thickness: >= 0,7 mm
	Eye protection	: Safety glasses
	Skin and body protection	: Long sleeved clothing Rubber apron
	Hygiene measures	<ul> <li>When using do not eat or drink.</li> <li>Do not smoke.</li> <li>Wash hands before breaks and at the end of workday.</li> <li>Shower or bathe at the end of working.</li> <li>Keep working clothes separately.</li> </ul>
	Protective measures	: antistatic shoes
	Environmental exposure cont	rols
	General advice	: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

# 9. Physical and chemical properties

# 9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: yellow
Odour	: characteristic
pН	: No data available
Boiling point/boiling range	: 135 - 220 $^\circ\text{C},$ 1.013 hPa, Value refers to the solvent.
Flash point	: > 40 °C
Lower explosion limit	: 0,6 %(V), Value refers to the solvent.
Upper explosion limit	: 7,2 %(V), Value refers to the solvent.



Vapour pressure	: 2,3 hPa, 20 °C, Value refers to the solvent.
Density	: 1,0 g/cm3, 20 °C
Water solubility	: slightly soluble
Partition coefficient: n- octanol/water	: No data available
Auto-ignition temperature	: > 200 °C, Value refers to the solvent.
Ignition temperature	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
9.2 Other information	

: No data available

# Refractive index

## 10. Stability and reactivity

#### **10.1 Reactivity**

Stable at normal ambient temperature and pressure.

#### 10.2 Chemical stability

No decomposition if stored normally.

## 10.3 Possibility of hazardous reactions

mixture with air.
mixture with a

## 10.4 Conditions to avoid

#### 10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents

## **10.6 Hazardous decomposition products**

Hazardous decomposition	: No decomposition if used as directed.
products	

## 11. Toxicological information

## 11.1 Information on toxicological effects

#### **Components:**

<b>Zinc bis(2-ethylhexanoate) :</b> Acute oral toxicity	<ul> <li>LD50: &gt; 2.000 mg/kg, Rat, standardised international/national methodology, Based on available data, the classification criteria are not met.</li> </ul>
Acute inhalation toxicity	: Not classified due to lack of data.



Acute dermal toxicity	: Read-across (Analogy)
	: LD50: > 2.000 mg/kg, Rat, OECD Test Guideline 402, Based on available data, the classification criteria are not met.
Skin corrosion/irritation	: Read-across (Analogy)
	: Rabbit, Result: slight irritation, OECD Test Guideline 404, GLP: yes, Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	: Read-across (Analogy)
	: Rabbit, Result: irritating, OECD Test Guideline 405, GLP: yes
Respiratory or skin sensitisation	: Skin sensitisation
	: Read-across (Analogy), Based on available data, the classification criteria are not met.
	: Respiratory sensitisation
	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity in vitro	: Read-across (Analogy)
	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Read-across (Analogy)
	: Based on available data, the classification criteria are not met.
Reproductive toxicity	: Read-across (Analogy)
	: Suspected of damaging the unborn child.
STOT - single exposure	: Remarks: Based on available data, the classification criteria are not met.
STOT - repeated exposure	: Read-across (Analogy), Based on available data, the classification criteria are not met.
Aspiration toxicity	: Based on available data, the classification criteria are not met.
Further information	: CMR effects, Carcinogenicity, Mutagenicity, Reproductive toxicity, Hazard assessment, Category 1A, Category 1B, Based on available data, the classification criteria are not met.
	: Likely route of exposure, Inhalation, Ingestion, Skin contact
Hydrocarbons, C9-C12, n-alk	anes, isoalkanes, cyclics, aromatics (2-25%) :
Acute oral toxicity	: LD50: > 15.000 mg/kg, Rat, OECD Test Guideline 401, Based on available data, the classification criteria are not met.
Acute inhalation toxicity	<ul> <li>LC50: &gt; 13,1 mg/l, 4 h, Rat, vapour, OECD Test Guideline 403, Based on available data, the classification criteria are not met.</li> </ul>



Acute dermal toxicity	: LD50: > 4 mL/kg bw, Rat, standardised international/national methodology, GLP: no, Based on available data, the classification criteria are not met.
Skin corrosion/irritation	<ol> <li>Rabbit, Result: not irritating, OECD Test Guideline 404, 4 h, GLP: yes, Based on available data, the classification criteria are not met.</li> </ol>
Serious eye damage/eye irritation	: Rabbit, Result: not irritating, OECD Test Guideline 405, GLP: yes, Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	: Skin sensitisation
	: Maximisation Test, Guinea pig, Result: Does not cause skin sensitisation., OECD Test Guideline 406, GLP: no, Based on available data, the classification criteria are not met.
	: Respiratory sensitisation, Not classified due to lack of data.
Germ cell mutagenicity	
Genotoxicity in vitro	<ul> <li>Mutagenicity (in vitro mammalian cytogenetic test), Human lymphocytes, Result: negative, OECD Test Guideline 473</li> </ul>
	: Mutagenicity (Salmonella typhimurium - reverse mutation assay), Bacteria, Result: negative, OECD Test Guideline 471
	: Read-across (Analogy)
	<ul> <li>Genotoxicity in vitro, mouse lymphoma cells, Result: negative, OECD Test Guideline 476, Based on available data, the classification criteria are not met.</li> </ul>
Genotoxicity in vivo	: Read-across (Analogy)
	<ul> <li>In vivo micronucleus test, Mouse, Oral, OECD Test Guideline 474, Result: negative</li> </ul>
	: Read-across (Analogy)
	<ul> <li>Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis), Mouse, intraperitoneally, OECD Test Guideline 475, Result: negative</li> </ul>
	: Read-across (Analogy)
	<ul> <li>Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis), Mouse, Inhalation, OECD Test Guideline 475, Result: negative, Based on available data, the classification criteria are not met.</li> </ul>
Carcinogenicity	: Read-across (Analogy)
	: Rat, Inhalation, OECD Test Guideline 453, Based on available data, the classification criteria are not met.
Reproductive toxicity	<ul> <li>Screening for reproductive/developmental toxicity, Rat, Inhalation, Test period: 8 weeks, OECD Test Guideline 421, GLP: no</li> </ul>



	: Read-across (Analogy)
	: Two-generation reproductive toxicity, Mouse, Inhalation, OECD Test Guideline 416, GLP: yes
	: Read-across (Analogy)
	: Screening for reproductive/developmental toxicity, Rat, Oral, OECD Test Guideline 421, GLP: yes
	: Read-across (Analogy)
	<ul> <li>Screening for reproductive/developmental toxicity, Rat, Oral, OECD Test Guideline 422, GLP: yes, Based on available data, the classification criteria are not met.</li> </ul>
Teratogenicity	: Rat, Inhalation, standardised international/national methodology, GLP: no, Based on available data, the classification criteria are not met.
STOT - single exposure	<ul> <li>Exposure routes: Inhalation</li> <li>Target Organs: Nervous system</li> <li>Assessment: May cause drowsiness or dizziness.</li> </ul>
STOT - repeated exposure	: Rat, Oral, Exposure time: 30 days, OECD Test Guideline 408, Based on available data, the classification criteria are not met.
STOT - repeated exposure	: Read-across (Analogy)
STOT - repeated exposure	<ul> <li>Rat, Dermal, Exposure time: 13 weeks, OECD Test Guideline 411, GLP: yes, Based on available data, the classification criteria are not met.</li> </ul>
STOT - repeated exposure	: Rat, Inhalation, Exposure time: 12 weeks, OECD Test Guideline 413, GLP: no, Based on available data, the classification criteria are not met.
Aspiration toxicity	: May be fatal if swallowed and enters airways.
Further information	<ul> <li>CMR effects, Carcinogenicity, Mutagenicity, Reproductive toxicity, Hazard assessment, Category 1A, Category 1B, Based on available data, the classification criteria are not met.</li> </ul>
	: Likely route of exposure, Inhalation, Ingestion, Skin contact
2-(2-Butoxyethoxy) ethanole	
Acute oral toxicity	<ul> <li>LD50: 2.410 mg/kg, Mouse(male), OECD Test Guideline 401, GLP: no, Based on available data, the classification criteria are not met.</li> </ul>
Acute inhalation toxicity	: LC50: > 0,35 mg/l, 4 h, Rat, vapour, Expert judgement, > Saturated vapour concentration
	: LC0: 0,35 mg/l, 14 d, Rat, vapour, OECD Test Guideline 412, GLP: yes, > Saturated vapour concentration
	: LC50: > 29 ppm, 2 h, Rat, vapour, OECD Test Guideline 403, GLP: no, Based on available data, the classification criteria



	are not met.
Acute dermal toxicity	<ul> <li>LD50: 2.764 mg/kg, Rabbit, OECD Test Guideline 402, GLP: no, Based on available data, the classification criteria are not met.</li> </ul>
Skin corrosion/irritation	<ul> <li>Rabbit, Result: slight irritation, OECD Test Guideline 404, 1 h, GLP: no, Based on available data, the classification criteria are not met.</li> </ul>
Serious eye damage/eye irritation	: Rabbit, Result: highly irritant, OECD Test Guideline 405, GLP: no
Respiratory or skin sensitisation	: Skin sensitisation
	: Maximisation Test, Guinea pig, Result: Does not cause skin sensitisation., OECD Test Guideline 406, Based on available data, the classification criteria are not met.
	: Respiratory sensitisation, Not classified due to lack of data.
Germ cell mutagenicity	
Genotoxicity in vitro	<ul> <li>Mutagenicity (Salmonella typhimurium - reverse mutation assay), Bacteria, Result: negative, OECD Test Guideline 471</li> </ul>
	<ul> <li>In vitro gene mutation study in mammalian cells, Chinese hamster ovary cells, Result: negative, OECD Test Guideline 476, GLP: yes</li> </ul>
	<ul> <li>Mutagenicity (in vitro mammalian cytogenetic test), Chinese hamster ovary cells, Result: negative, OECD Test Guideline 473, Based on available data, the classification criteria are not met.</li> </ul>
Genotoxicity in vivo	<ul> <li>Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis), Mouse, Oral, Single dose, OECD Test Guideline 475, Result: negative, Based on available data, the classification criteria are not met.</li> </ul>
Carcinogenicity	: Not classified due to lack of data.
Reproductive toxicity	: Read-across (Analogy)
	<ul> <li>Two-generation study, Mouse, Oral, standardised international/national methodology, Based on available data, the classification criteria are not met.</li> </ul>
Teratogenicity	: Rabbit, Skin contact, OECD Test Guideline 414
	: Rat, Oral, OECD Test Guideline 414, Based on available data, the classification criteria are not met.
STOT - single exposure	: Remarks: Based on available data, the classification criteria are not met.
STOT - repeated exposure	: Rat, Oral, standardised international/national methodology, GLP: yes
STOT - repeated exposure	: Rat, Dermal, standardised international/national methodology



ional/national vailable data, the
enicity, Reproductive bry 1A, Category 1B, cation criteria are not met.
ei Di Ca

## 12. Ecological information

# 12.1 Toxicity **Components:** Zinc bis(2-ethylhexanoate) : Toxicity to fish Read-across (Analogy) : LC50: 100 mg/l, 96 h, Cyprinus carpio (Carp), OECD Test Guideline 203, GLP: yes Toxicity to daphnia and other aquatic invertebrates Read-across (Analogy) : EC50: 5 mg/l, 48 h, Daphnia magna (Water flea), static test, OECD Test Guideline 202, GLP: yes Toxicity to algae Read-across (Analogy) : EC50: 2,72 mg/l, 72 h, Pseudokirchneriella subcapitata (green algae), static test, OECD Test Guideline 201, GLP: yes Toxicity to bacteria : IC50: > 100 mg/l, 3 h, activated sludge, static test, OECD Test Guideline 209 Toxicity to fish (Chronic toxicity) Read-across (Analogy) NOEC: 0,044 - 0,530 mg Zn/L, Fresh water Read-across (Analogy) NOEC: 0,025 mg Zn/L, Marine water Toxicity to daphnia and other aquatic invertebrates Read-across (Analogy) (Chronic toxicity) NOEC: 0,037 - 0,400 mg Zn/L, Fresh water



Read-across (Analogy) NOEC: 0,0056 - 0,9 mg Zn/L, Marine water

Ecotoxicology Assessment		
Acute aquatic toxicity	: Based on available data, the classification criteria are not met.	
Chronic aquatic toxicity	: Harmful to aquatic life with long lasting effects.	
Hydrocarbons, C9-C12, n-alk	anes, isoalkanes, cyclics, aromatics (2-25%) :	
Toxicity to fish	: LL50: 10 - 30 mg/l, 96 h, Oncorhynchus mykiss (rainbow trout), semi-static test, OECD Test Guideline 203, GLP: yes	
Toxicity to daphnia and other aquatic invertebrates	: EL50: 10 - 22 mg/l, 48 h, Daphnia magna (Water flea), static test, OECD Test Guideline 202, GLP: yes	
Toxicity to algae	: EL50: 4,6 - 10 mg/l, 72 h, Pseudokirchneriella subcapitata (green algae), Growth inhibition, OECD Test Guideline 201, GLP: yes	
	: EC50: 1,2 mg/l, 96 h, Pseudokirchneriella subcapitata (green algae), Growth inhibition, OECD Test Guideline 201, GLP: yes	
Toxicity to bacteria	: EL50: 43,98 mg/l, 48 h, Tetrahymena pyriformis, Growth inhibition, QSAR, GLP: no	
Toxicity to fish (Chronic toxicity)	: NOEL: 0,13 mg/l, 28 d, Oncorhynchus mykiss (rainbow trout), QSAR, GLP: no	
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: Read-across (Analogy) NOEC: 0,097 mg/l, 21 d, Daphnia magna (Water flea), semi- static test, OECD Test Guideline 211, GLP: yes	
2-(2-Butoxyethoxy) ethanole	:	
Toxicity to fish	: LC50: 1.300 mg/l, 96 h, Lepomis macrochirus (Bluegill sunfish), static test, OECD Test Guideline 203, GLP: no	
Toxicity to daphnia and other aquatic invertebrates	: NOEC: >= 100 mg/l, 48 h, Daphnia magna (Water flea), static test, OECD Test Guideline 202, GLP: yes	
Toxicity to algae	: NOEC: > 100 mg/l, 96 h, Desmodesmus subspicatus (green algae), static test, OECD Test Guideline 201, GLP: yes	
Toxicity to bacteria	: EC10: > 1.995 mg/l, 0,5 h, activated sludge, Respiration inhibition, OECD Test Guideline 209, GLP: no	
Ecotoxicology Assessment		
Acute aquatic toxicity	: Based on available data, the classification criteria are not met.	



	Chronic aquatic toxicity	: Based on available data, the classification criteria are not met.
12.2 Persistence and degradability		
	Components:	
	Zinc bis(2-ethvlhexanoate) :	
	Biodegradability	
	blouegradability	Read-across (Analogy) : aerobic, 70 %, Result: Readily biodegradable, Exposure time: 28 d, activated sludge, OECD Test Guideline 301D, GLP: yes
	Hydrocarbons, C9-C12, n-alka	nes, isoalkanes, cyclics, aromatics (2-25%) :
	Biodegradability	
		Read-across (Analogy) : aerobic, Result: Readily biodegradable, Exposure time: 31 d, activated sludge, OECD Test Guideline 301, GLP: yes
	2-(2-Butoxyethoxy) ethanole :	
	Biodegradability	: aerobic, 85 %, Result: Readily biodegradable, Exposure time: 28 d, activated sludge, OECD Test Guideline 301C, GLP: no
12.3	Bioaccumulative potential	
	<u>Components:</u> Zinc bis(2-ethylhexanoate) : Bioaccumulation	:
		Read-across (Analogy), This substance is not considered to be bioaccumulating.
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) :		nes, isoalkanes, cyclics, aromatics (2-25%) :
	Bioaccumulation	: study technically not feasible
	2-(2-Butoxyethoxy) ethanole :	
	Bioaccumulation	: Disconventetion is vehicely
12.4	Mobility in soil	Bloaccumulation is unlikely.
	<u>Components:</u> Zinc bis(2-ethylhexanoate) : Mobility Hydrocarbons, C9-C12, n-alka Mobility 2-(2-Butoxyethoxy) ethanole : Mobility	<ul> <li>Not applicable</li> <li>nes, isoalkanes, cyclics, aromatics (2-25%) :</li> <li>Predicted distribution to environmental compartments, Air</li> <li>QSAR, Predicted distribution to environmental compartments, Water</li> </ul>
40 E	Desults of DDT and vDvD ass	
12.5		essment
	Zinc bis(2-ethylhexanoate) :	
	Assessment	: Based on available data, the classification criteria are not met.
	Hydrocarbons, C9-C12, n-alka Assessment	nes, isoaikanes, cyclics, aromatics (2-25%) : : Based on available data, the classification criteria are not met.



2-(2-Butoxyethoxy) ethanole Assessment 12.6 Other adverse effects	: : Based on available data, the classification criteria are not met.
Zinc bis(2-ethylhexanoate) : Further information	: No information available.
Hydrocarbons, C9-C12, n-all Further information	kanes, isoalkanes, cyclics, aromatics (2-25%) : : No information available.
<b>2-(2-Butoxyethoxy) ethanole</b> Further information	: No information available.
13. Disposal considerations	
13.1 Waste treatment methods	
Product	: Dispose of as special waste in compliance with local and national regulations.
Contaminated packaging	: Empty remaining contents. Offer rinsed packaging material to local recycling facilities.
14. Transport information	
14.1 UN number ADR IMDG IATA	: 1993 : 1993 : 1993
14.2 Proper shipping name ADR	: FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C9-C12, n-
IMDG	alkanes, isoalkanes, cyclics, aromatics (2-25%), solution) : FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C9-C12, n- alkanes, isoalkanes, cyclics, aromatics (2-25%), solution)
ΙΑΤΑ	<ul> <li>FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C9-C12, n- alkanes, isoalkanes, cyclics, aromatics (2-25%), solution)</li> </ul>
14.3 Transport hazard class ADR IMDG IATA	: 3 : 3 : 3
<b>14.4 Packing group</b> <b>ADR</b> Packaging group Classification Code Hazard Identification Number	: III : F1 : 30

Labels Tunnel restriction code	: 3 : (D/E)
Packaging group Labels EmS Number Flash point	: III : 3 : F-E, S-E : 39°C c.c.
Packing instruction (cargo	: 366
Packing instruction (passenger aircraft)	: 355
Packaging group Labels	: III : 3
14.5 Environmental hazards	
Environmentally hazardous	: yes
IMDG Marine pollutant	: yes
IATA Environmentally hazardous	: yes
14.6 Special precautions for user	

See this safety data sheet chapter 6. - 8.

 

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

 : Not applicable

## 15. Regulatory information

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

Major Accident Hazard Legislation	: Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
Water contaminating class (Germany)	: WGK 2 water endangering
Other regulations	: Falls under the Dangerous Substances Regulations.
	: relevant: Directive 1999/92/EC, 94/9/EC, 98/24/EC
	: non-relevant: Regulation (EC) No. 2037/2000, (EC) No. 850/2004 with amending Directive 79/117/EEC, (EC) No. 689/2008



: 2-(2-Butoxyethoxy)ethanole:, REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

#### 15.2 Chemical safety assessment

This information is not available.

#### 16. Other information

#### Full text of H-Statements referred to under sections 2 and 3.

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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.