according to Regulation (EC) No. 1907/2006

# **LE4462**

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

1.1 Product identifier

Trade name : LE4462

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

Use of the : Raw material for plastics industry

Substance/Mixture

1.3 Details of the supplier of the safety data sheet

Supplier : Borealis AG

Trabrennstrasse 6-8, 1020 Vienna, Austria

Telephone: +43 1 22400 0

E-mail address : sds@borealisgroup.com

1.4 Emergency telephone number

+44 (0) 1235 239 670 (NCEC Carechem 24)

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

#### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Reproductive toxicity, Category 1B H360D: May damage the unborn child.

Specific target organ toxicity - repeated exposure, Category 2, Immune system

H373: May cause damage to organs through

prolonged or repeated exposure.

#### 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H360D May damage the unborn child.

H373 May cause damage to organs () through prolonged or



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repeated exposure.

Precautionary statements : Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been

read and understood.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection/ hearing protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/

attention.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

#### Hazardous components which must be listed on the label:

dioctyltin dilaurate

#### 2.3 Other hazards

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

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

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

The product burns, but is not classified as flammable.

Dust from the product gives a potential risk for dust explosion.

During crosslinking reaction in combination with base resin: methanol (Flam. Liq. 2; H225, Acute Tox.

3; H301, Acute Tox. 3; H311, Acute Tox. 3; H331, STOT SE 1; H370) is released.

In contact with water or moisture methanol will be released.

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

#### 3.2 Mixtures

Chemical nature : The product is a polyethylene copolymer.

It contains carbon black (EC No 215-609-9, CAS No 1333-86-

4).

It contains stabilisers.



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### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
dioctyltin dilaurate	3648-18-8 222-883-3 050-031-00-9 UK-20-7333232785- 4-0000	STOT RE 1; H372 Repr. 1B; H360D	>= 1 - < 10

For explanation of abbreviations see section 16.

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

#### 4.1 Description of first aid measures

If inhaled : Move to fresh air in case of accidental inhalation of vapours or

decomposition products.

Seek medical advice immediately.

In case of skin contact : If molten material comes in contact with the skin, cool with

plenty of water. DO NOT remove solidified product, as

removal could result in severe tissue damage.

Obtain medical attention.

Wash off with soap and plenty of water.

Call a physician if irritation develops or persists.

In case of eye contact : Rinse thoroughly with plenty of water, also under the eyelids.

Get medical attention if irritation develops and persists.

If swallowed : If swallowed, rinse mouth with water (only if the person is

conscious).

Seek medical advice immediately.

# 4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Inhalation of dust may irritate the respiratory tract.

Prolonged inhalation of high doses of decomposition products

may give headache or irritation of the respiratory tract.

Symptoms of poisoning (methanol):

Daze Dizziness



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Nausea

Abdominal pain Respiratory disorders

Symptoms of poisoning, prolonged exposure (methanol):

Blindness

Risks : May damage the unborn child.

## 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

No specific instructions needed.

# **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media : Water in spread jet, dry chemicals, foam or carbon dioxide.

## 5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

: Principal toxicant in the smoke is carbon monoxide.

#### 5.3 Advice for firefighters

for firefighters

Special protective equipment : Wear self-contained breathing apparatus and protective suit.

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

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

Use personal protective equipment.

Ensure adequate ventilation.

#### 6.2 Environmental precautions

It is recommended to implement systems and practices (such as Operation Clean Sweep®) to prevent accidental release of plastics in to the environment.

Should not be released into the environment.

## 6.3 Methods and material for containment and cleaning up

Vacuum or sweep up spill.

All spill of material must be removed immediately to prevent slipping accidents.



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Recycle or dispose loose material properly.

Do not flush into surface water or sanitary sewer system.

#### 6.4 Reference to other sections

For personal protection see section 8. For disposal considerations see section 13.

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

Advice on safe handling : During processing and thermal treatment of the product, small

amounts of volatile hydrocarbons may be released.

Provide adequate ventilation.

Local exhaust ventilation may be necessary.

Avoid inhalation of dust and decomposition fumes.

Avoid contact with skin and eyes.

Advice on protection against

fire and explosion

: Dust from the product gives a potential risk for dust explosion.

All equipment shall be grounded. Routine housekeeping should be instituted to ensure that dusts do not accumulate on

surfaces.

Hygiene measures : When using do not eat, drink or smoke. Wash hands before

breaks and at the end of workday.

Handle in accordance with good industrial hygiene and safety

practice.

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

Requirements for storage

areas and containers

: Store locked up.

Keep in a dry, cool and well-ventilated place.

Further information on

storage stability

Keep in a dry place.

## 7.3 Specific end use(s)

Specific use(s) : Raw material for wire and cable applications.



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

#### 8.1 Control parameters

For national exposure limit (OEL) values, check country specific safety data sheets.

#### Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
methanol	67-56-1	TWA	200 ppm	2006/15/EC
			260 mg/m3	
Further information	Indicative, Identifies the possibility of significant uptake through the skin			

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

Substance name	End Use	Exposure routes	Potential health effects	Value
LE4462				
Remarks:	Not applicable			

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

Substance name		Environmental Compartment	Value
LE4462			
Remarks:	Not applicable		

#### 8.2 Exposure controls

#### **Engineering measures**

Provide adequate ventilation.

Local exhaust ventilation may be necessary.

## Personal protective equipment

Eye protection : Safety glasses

Use eye protection according to EN 166.

Hand protection

Material : butyl-rubber
Break through time : >= 480 min
Glove thickness : 0,5 mm

Material : Fluorinated rubber

Break through time : >= 480 minGlove thickness : 0,4 mm

Remarks : Please observe the instructions regarding permeability and

breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the

danger of cuts, abrasion, and the contact time.



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Protective gloves complying with EN 374.

Skin and body protection : Protective clothing

Respiratory protection : In case of insufficient ventilation: Respirator with ABEK-P3

filter or self-contained breathing apparatus. In case of dust development use dust mask.

Protective measures : Appropriate personal protective equipment (PPE) shall be

worn in accordance with Regulation (EU) 2016/425.

## **Environmental exposure controls**

General advice : It is recommended to implement systems and practices (such

as Operation Clean Sweep®) to prevent accidental release of

plastics in to the environment.

Should not be released into the environment.

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

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

Physical state : pellets

Colour : black

Odour : odourless

Melting point/range : 100 - 140 °C

Boiling range : Decomposes on heating.

Flammability : The product is not flammable.

Upper explosion limit / Upper

flammability limit

Not applicable

Lower explosion limit / Lower :

flammability limit

Not applicable

Flash point : Not applicable, (solid)

Auto-ignition temperature : > 320 °C

pH : Not applicable insoluble

Viscosity

Viscosity, kinematic : No data available



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Solubility(ies)

Water solubility : insoluble

Partition coefficient: n-

octanol/water

Not applicable

insoluble

Vapour pressure : Not applicable

(solid)

Density : 0,9 - 1,0 g/cm<sup>3</sup>

Bulk density : 500 - 600 kg/m<sup>3</sup>

Relative vapour density : Not applicable

Particle size

3 - 10 mm

Method: Image analysis (surface-based)

9.2 Other information

Explosives : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Evaporation rate : Not applicable

(solid)

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Stable under recommended storage conditions.

### 10.2 Chemical stability

The product is a stable thermoplastic, with no chemical reactivity.

The intended crosslinking reaction occurs in combination with the base resin and moisture: at ambient conditions, in sauna or hot water bath.

## 10.3 Possibility of hazardous reactions

Hazardous reactions : In contact with water or moisture methanol will be released.

10.4 Conditions to avoid

Conditions to avoid : Exposure to moisture



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Extremes of temperature and direct sunlight.

#### 10.5 Incompatible materials

Materials to avoid : None known.

#### 10.6 Hazardous decomposition products

Under fire conditions:

Carbon monoxide

During processing and thermal treatment of the product, small amounts of volatile hydrocarbons may be released.

During crosslinking reaction in combination with base resin: methanol

# **SECTION 11: Toxicological information**

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

### **Acute toxicity**

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

#### Skin corrosion/irritation

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

#### Serious eye damage/eye irritation

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

#### Respiratory or skin sensitisation

#### Skin sensitisation

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

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

#### Carcinogenicity

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

#### Reproductive toxicity

May damage the unborn child.

## STOT - single exposure

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

## STOT - repeated exposure

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



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## **Aspiration toxicity**

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

## 11.2 Information on other hazards

#### **Endocrine disrupting properties**

**Product:** 

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

**Further information** 

**Product:** 

Remarks : Information given is based on data of the components.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

No data available

## 12.2 Persistence and degradability

**Product:** 

Biodegradability : Remarks: Not readily biodegradable.

#### 12.3 Bioaccumulative potential

**Product:** 

Bioaccumulation : Remarks: Does not accumulate in organisms.

# 12.4 Mobility in soil

**Product:** 

Mobility : Remarks: Not expected to adsorb on soil.

#### 12.5 Results of PBT and vPvB assessment

**Product:** 

Assessment : This substance/mixture contains no components considered

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



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0.1% or higher...

#### 12.6 Endocrine disrupting properties

### **Product:**

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

#### 12.7 Other adverse effects

#### **Product:**

Additional ecological

information

: Should not be released into the environment.

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : Dispose of contents/ container to an approved waste disposal

plant.

Check with local regulations.

Contaminated packaging : Dispose of as unused product.

Empty containers should be taken to an approved waste

handling site for recycling or disposal.

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

## 14.1 UN number or ID number

Not regulated as a dangerous good

# 14.2 UN proper shipping name

Not regulated as a dangerous good

# 14.3 Transport hazard class(es)

Not regulated as a dangerous good

#### 14.4 Packing group

Not regulated as a dangerous good



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#### 14.5 Environmental hazards

Not regulated as a dangerous good

# 14.6 Special precautions for user

Remarks : Not dangerous goods in the meaning of ADR/RID, ADN,

IMDG-Code, ICAO/IATA-DGR

## 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

# **SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufacture, placing on : dioctyltin dilaurate

the market and use of certain dangerous substances,

mixtures and articles (Annex XVII)

## Other regulations:

Chemical qualifying for PIC notification. (dioctyltin dilaurate)

# 15.2 Chemical safety assessment

no

## **SECTION 16: Other information**

### **Full text of H-Statements**

H360D : May damage the unborn child.

H372 : Causes damage to organs through prolonged or repeated

exposure.

H331 : Toxic if inhaled.

H311 : Toxic in contact with skin. H301 : Toxic if swallowed.

H370 : Causes damage to organs.

H225 : Highly flammable liquid and vapour.

# Full text of other abbreviations

Repr. : Reproductive toxicity

STOT RE : Specific target organ toxicity - repeated exposure 2006/15/EC : Europe. Indicative occupational exposure limit values

2006/15/EC / TWA : Limit Value - eight hours



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#### **Further information**

Other information : Issued according to Regulation (EC) No 1907/2006, Annex II,

and its amendments.

Changes since the last version are highlighted in the margin.

This version replaces all previous versions.

Issuer : Borealis, Group Product Stewardship / Niina Kerttula

Sources of key data used to compile the Safety Data

Sheet

The classification information of components is based on raw

material supplier data.

#### Classification of the mixture: Classification procedure:

Repr. 1B H360D Calculation method STOT RE 2 H373 Calculation method

#### Disclaimer

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