

# SAFETY DATA SHEET

## Borlink™ LE0315

Version 1.0

Revision Date:  
02.01.2020

Date of last issue: -  
Date of first issue: 02.01.2020

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### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Borlink LE0315

#### Manufacturer or supplier's details

Supplier : Borealis Compounds Inc

Address : 176 Thomas Road, NJ 07865 Port Murray, United States of America (USA)

Telephone : +1 908 850 6200

Emergency telephone number : +44 (0) 1235 239 670 (NCEC Carechem 24)

E-mail address : [sds@borealisgroup.com](mailto:sds@borealisgroup.com)

#### Recommended use of the chemical and restrictions on use

Recommended use : raw material for plastics industry

Restrictions on use : Use only according to our recommendations.

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### 2. HAZARDS IDENTIFICATION

#### GHS Classification

Skin irritation : Category 3

#### GHS-Labeling

Signal word : Warning

Hazard statements : H316 Causes mild skin irritation.

Precautionary statements : **Response:**  
P332 + P313 If skin irritation occurs: Get medical advice/  
attention.

#### Other hazards which do not result in classification

The product burns, but is not classified as flammable.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

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Chemical nature : The product is an elastomer modified polyethylene copolymer.  
It contains carbon black.

### Hazardous components

Chemical name	CAS-No.	Classification	MAC value mg/m <sup>3</sup> / TSEL value	Concentration (% w/w)
polyethene wax	9002-88-4		MPC-STEL: 10 mg/m <sup>3</sup> Class 4 - Low hazard	>= 1 - < 10
poly(2,2,4-trimethyl-1,2-dihydroquinoline)	26780-96-1	Aquatic Chronic 3; H412		>= 1 - < 2,5
tert-butyl $\alpha$ , $\alpha$ -dimethylbenzyl peroxide	3457-61-2	Org. Perox. F; H242 Skin Irrit. 2; H315 Aquatic Chronic 2; H411		>= 1 - < 2,5

For explanation of abbreviations see section 16.

## 4. FIRST AID MEASURES

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

In case of skin contact : Wash off with plenty of water.  
Call a physician if irritation develops or persists.  
  
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.

In case of eye contact : Flush eyes with water as a precaution.

If swallowed : Rinse mouth with water.

Most important symptoms and effects, both acute and delayed : 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.

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Prolonged skin contact may give skin irritation caused by the peroxide content present on the surface of the granules.

Notes to physician : Treat symptomatically.

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### 5. FIREFIGHTING MEASURES

#### Flammable properties

- Flash point : Not applicable (solid)
- Ignition temperature : > 320 °C
- Upper explosion limit : Not applicable
- Lower explosion limit : Not applicable
- Flammability (solid, gas) : The product is not flammable.
- Suitable extinguishing media : Water in spread jet, dry chemicals, foam or carbon dioxide.
- Specific hazards during firefighting : Principal toxicant in the smoke is carbon monoxide.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.
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### 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.  
Use personal protective equipment.
- Environmental precautions : Prevent product from entering environment and drains.
- Methods and materials 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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### 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Dust from the product represents a risk for dust explosions when dispersed with air in a sufficient concentration and with
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the presence of an ignition source. All equipment shall be grounded. Routine housekeeping will also contribute in preventing risks of dust explosions.

Advice on safe handling : During processing and thermal treatment of the product, small amounts of volatile hydrocarbons may be released. Avoid inhalation of dust and decomposition fumes. Avoid contact with skin and eyes.

Conditions for safe storage : Safety aspects do not require any special precautions in terms of storage.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Data Source
polyethene wax	9002-88-4	MPC-STEL (aerosol)	10 mg/m <sup>3</sup>	RU OEL
Further information: Class 4 - Low hazard				

However, as the chemical is embedded in a solid polymer, exposure is unlikely, unless the polymer is processed in a way that makes such exposure possible.

**Engineering measures** : Provide adequate ventilation. Local exhaust ventilation may be necessary.

#### Personal protective equipment

Respiratory protection : In case of dust development use dust mask.

#### Hand protection

Material : neoprene  
Break through time : > 480 min  
Glove thickness : 0,2 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.

Eye protection : Tightly fitting safety goggles

Skin and body protection : Long sleeved clothing

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Hygiene measures : When using do not eat, drink or smoke.  
Wash hands before breaks and immediately after handling the product.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : pellets

Colour : black

Odour : odourless

Odour Threshold : Not applicable

pH : Not applicable insoluble

Melting range : 100 - 140 °C

Boiling range : Decomposes on heating.

Flash point : Not applicable (solid)

Evaporation rate : Not applicable (solid)

Flammability (solid, gas) : The product is not flammable.

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Vapour pressure : Not applicable (solid)

Density : 1,1 - 1,2 g/cm<sup>3</sup>

Bulk density : No data available

Solubility(ies)  
Water solubility : insoluble

Partition coefficient: n-octanol/water : Not applicable insoluble

Auto-ignition temperature : > 320 °C

Viscosity  
Viscosity, kinematic : No data available

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

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### 10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.  
Chemical stability : The product is a stable thermoplastic with no chemical reactivity below 140°C. Above 140°C the intended crosslinking reaction occurs.  
Possibility of hazardous reactions : None known.  
Conditions to avoid : Extremes of temperature and direct sunlight.  
Incompatible materials : Strong oxidizing agents  
Strong reducing agents  
Strong acids and strong bases  
Hazardous decomposition products : Under fire conditions:  
Carbon monoxide  
During processing and thermal treatment of the product, small amounts of volatile hydrocarbons may be released.

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### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

Not classified based on available information.

#### Skin corrosion/irritation

Causes mild skin irritation.

#### Serious eye damage/eye irritation

Not classified based on available information.

#### Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

#### Germ cell mutagenicity

Not classified based on available information.

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### **Carcinogenicity**

Not classified based on available information.

### **Reproductive toxicity**

Not classified based on available information.

### **STOT - single exposure**

Not classified based on available information.

### **STOT - repeated exposure**

Not classified based on available information.

### **Aspiration toxicity**

Not classified based on available information.

### **Further information**

#### **Product:**

Remarks: 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.

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## 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

#### **Components:**

#### **poly(2,2,4-trimethyl-1,2-dihydroquinoline):**

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 56 mg/l  
Exposure time: 48 h

### **Persistence and degradability**

#### **Product:**

Biodegradability : Remarks: Not readily biodegradable.

### **Bioaccumulative potential**

#### **Product:**

Bioaccumulation : Remarks: Does not accumulate in organisms.

### **Mobility in soil**

#### **Product:**

Mobility : Remarks: The product is insoluble and sinks in water.  
Not expected to adsorb on soil.

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### Other adverse effects

#### **Product:**

Additional ecological  
information

: The product is not classified as hazardous for the  
environment.

### Hygienic standards:

#### (Allowable concentration in air, water, including fishery waters, soil)

Components	Air	Water	Soil	Data Source
poly(2,2,4-trimethyl-1,2-dihydroquinoline) 26780-96-1		TSEL value: 0,001 mg/l Limiting health hazard indicator: sanitary- toxicological Hazard class: Class 2 - highly dangerous		List 3

List 3: GN 2.1.5.2307-07 Tentative safe exposure level (TSEL) of Chemical Substances Contained in Water of Water Bodies for Economic-Potable and Social-Domestic Water Use

## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues

: The product may be safely used as fuel.  
Proper combustion does not require any special flue gas  
control.  
Check with local regulations.

Contaminated packaging

: Empty containers should be taken to an approved waste  
handling site for recycling or disposal.

## 14. TRANSPORT INFORMATION

### ADR

Not regulated as a dangerous good

### UNRTDG

Not regulated as a dangerous good

### IATA-DGR



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Not regulated as a dangerous good

### IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

## 15. REGULATORY INFORMATION

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

No data available

## 16. OTHER INFORMATION

### Full text of H-Statements

H242	Heating may cause a fire.
H315	Causes skin irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

### Full text of other abbreviations

Aquatic Chronic	: Long-term (chronic) aquatic hazard
Org. Perox.	: Organic peroxides
Skin Irrit.	: Skin irritation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; 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; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent,

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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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance 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

### Further information

Other information : SDS According to GOST 30333-2007

Issuer : Borealis, Group Product Stewardship / Aino Haritonova

Sources of key data used to compile the Safety Data Sheet : The classification information of components is based on raw material supplier data.

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