SAFETY DATA SHEET

Borlink™ LE0315

Version 5.0 | Revision Date 04/30/2024 | Former date 08/21/2019

SECTION 1. IDENTIFICATION

Product name : Borlink LE0315
Other means of identification : No data available

Manufacturer or supplier's details

Supplier : Borealis Compounds Inc
176 Thomas Road, NJ 07865 Port Murray, United States of America (USA)
Telephone: +1 908 850 6200

E-mail address : sds@borealisgroup.com

Emergency telephone number : +1 866 519 4752 (3E) Access code: 336296Borealis Compounds Inc, Borealis North America HSE: 908-850-6200 for Monday – Friday 8-4:30pm excluding holidays

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.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

The product burns, but is not classified as flammable.
Dust from the product gives a potential risk for dust explosion.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture
Chemical nature : The product is an elastomer modified polyethylene copolymer.

Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
carbon black	carbon black	1333-86-4	>= 30 - < 60 *
paraffin waxes and hydrocarbon waxes	paraffin waxes and hydrocarbon waxes	8002-74-2	>= 1 - < 5 *
tert-butyl α, α-dimethylbenzyl peroxide	tert-butyl α, α-dimethylbenzyl peroxide	3457-61-2	>= 1 - < 5 *

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* Actual concentration or concentration range is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

If inhaled	:	Move to fresh air.
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 plenty of water. Call a physician if irritation develops or persists.
In case of eye contact	:	Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.
If swallowed	:	Rinse mouth with water. Consult a physician if necessary.
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. Skin contact may provoke the following symptoms: Local irritation
Notes to physician	:	Treat symptomatically. No specific instructions needed.

SECTION 5. FIREFIGHTING MEASURES

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Ensure adequate ventilation.
Environmental precautions	:	Should not be released into the environment. It is recommended to implement systems and practices (such as Operation Clean Sweep®) to prevent accidental release of plastics in to the environment.
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. Recycle or dispose loose material properly. Do not flush into surface water or sanitary sewer system.

SECTION 7. HANDLING AND STORAGE

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.
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.
Conditions for safe storage	:	Safety aspects do not require any special precautions in terms of storage.
Further information on storage stability	:	Keep in a dry place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
carbon black	1333-86-4	TWA	3.5 mg/m3	CA AB OEL
		TWA (Inhalable)	3 mg/m3	CA BC OEL
		TWAEV (inhalable dust)	3 mg/m3	CA QC OEL
		TWA (Inhalable particulate matter)	3 mg/m3	ACGIH
paraffin waxes and hydrocarbon waxes	8002-74-2	TWA (Fumes)	2 mg/m3	CA AB OEL
		TWA (Fumes)	2 mg/m3	CA BC OEL
		TWAEV (Fumes)	2 mg/m3	CA QC OEL
		TWA (Fumes)	2 mg/m3	ACGIH

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

Personal protective equipment

Respiratory protection : In case of dust development use dust mask.
In the case of vapour formation use a respirator with an approved filter.

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

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	:	Safety glasses
Skin and body protection	:	Protective clothing
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. Regular cleaning of equipment, work area and clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	pellets
Colour	:	black
Odour	:	odourless
Odour Threshold	:	Not applicable
pH	:	Not applicable insoluble
Melting point/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 / Upper flammability limit	:	Not applicable
Lower explosion limit / Lower	:	Not applicable

flammability limit		
Vapour pressure	:	Not applicable (solid)
Density	:	1.1 - 1.2 g/cm³
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
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Particle size	:	3 - 10 mm Method: Image analysis (surface-based)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable under recommended storage conditions.
Chemical stability	:	The product is a stable thermoplastic, with no chemical reactivity.
Possibility of hazardous reactions	:	None known.
Conditions to avoid	:	Extremes of temperature and direct sunlight.
Incompatible materials	:	None known.
Hazardous decomposition products	:	Under fire conditions: Carbon monoxide During processing and thermal treatment of the product, small amounts of volatile hydrocarbons may be released.

SECTION 11. TOXICOLOGICAL INFORMATION

Skin corrosion/irritation

Product:

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

Serious eye damage/eye irritation

Product:

Remarks : Contact with eyes may cause irritation.

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.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

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: Not expected to adsorb on soil.

Other adverse effects

Product:

Additional ecological information : Should not be released into the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of contents/ container to an approved waste disposal plant.
Reuse or recycle if not contaminated.
Check with local regulations.
The product may be safely used as fuel.

		Proper combustion does not require any special flue gas control.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal. Reuse or recycle if not contaminated.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG
Not regulated as a dangerous good

UNRTDG
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
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.

National Regulations

TDG
Not regulated as a dangerous good

TDG
Not regulated as a dangerous good

Special precautions for user

Remarks	:	Not dangerous goods in the meaning of ADR/RID, ADN, IMDG-Code, ICAO/IATA-DGR

SECTION 15. REGULATORY INFORMATION

NPRI Components : zinc compounds

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

This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
CA AB OEL	:	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	:	Canada. British Columbia OEL
CA QC OEL	:	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
ACGIH / TWA	:	8-hour, time-weighted average
CA AB OEL / TWA	:	8-hour Occupational exposure limit
CA BC OEL / TWA	:	8-hour time weighted average
CA QC OEL / TWAEV	:	Time-weighted average exposure value

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Issued according to HPR (WHMIS 2015).

Sources of key data used to : The classification information of components is based on raw

compile the Safety Data Sheet		material supplier data.
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