Borlink™ LE4912

Version 1.0 Revision Date 05/14/2021 Former date -

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Borlink LE4912

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

Borealis Compounds Inc, Borealis North America HSE: 908-850-6200 for Monday – Friday 8-4:30pm excluding holidays +1 215 207 0061 (regional number, NCEC Carechem 24)

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 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin sensitisation : Category 1

GHS label elements

Hazard pictograms



Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.

Precautionary statements : Prevention:

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P272 Contaminated work clothing must not be allowed out of

the workplace.

P280 Wear protective gloves.

Borlink is a trademark of the Borealis group.





Borlink LE4912

Version 1.0 Revision Date 05/14/2021 Former date -

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P333 + P313 If skin irritation or rash occurs: Get medical advice/

attention.

P363 Wash contaminated clothing before reuse.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Other hazards

Warning!

May form combustible dust concentrations in air (during processing).

The product burns, but is not classified as flammable.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : The product is a polyethylene polymer.

Hazardous components

Chemical name	CAS-No.	Concentration (%)
4-methyl-2,4-diphenyl-1-pentene	6362-80-7	>= 0.1 - < 1

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

If inhaled : Move to fresh air.

If symptoms persist, call a physician.

In case of skin contact : Wash off with soap and 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.

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

: May cause an allergic skin reaction.

delayed

Inhalation of dust may irritate the respiratory tract.



Borlink LE4912

Version 1.0 Revision Date 05/14/2021 Former date -

Prolonged inhalation of high doses of decomposition products

may give headache or irritation of the respiratory tract.

Skin contact may provoke the following symptoms:

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.

Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a

potential dust explosion hazard.

for firefighters

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Use personal protective equipment.

: Should not be released into the environment. **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.

Methods and materials for containment and cleaning up : Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

Non-sparking tools should be used.

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.



Borlink LE4912

Version 1.0 Revision Date 05/14/2021 Former date -

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

Contains no substances with occupational exposure limit values.

Engineering measures

: Provide adequate ventilation.

Local exhaust ventilation may be necessary.

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen

deficient environment.

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.



Borlink LE4912

Version 1.0 Revision Date 05/14/2021 Former date -

Hand protection

Remarks : Wear suitable gloves.

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : pellets

Colour : natural colour

Odour : odourless

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 : Not applicable

Lower explosion limit : Not applicable

Vapour pressure : Not applicable (solid)

Density : 0.9 - 1.0 g/cm³

Solubility(ies)

Water solubility : insoluble



Borlink LE4912

Version 1.0 Revision Date 05/14/2021 Former date -

Partition coefficient: n-

octanol/water

: Not applicable insoluble

Viscosity

Viscosity, dynamic : No data available

Explosive properties : Not explosive

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

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.

Chemical stability : The product is a stable thermoplastic.

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

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

May cause an allergic skin reaction.

Respiratory sensitisation

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



Borlink LE4912

Version 1.0 Revision Date 05/14/2021 Former date -

Germ cell mutagenicity

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

Carcinogenicity

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

IARC No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHANo component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No component 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

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

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.

Aspiration toxicity

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

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

Components:

4-methyl-2,4-diphenyl-1-pentene:

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 0.057 mg/l

aquatic invertebrates Exposure time: 48 h

GLP: yes

Persistence and degradability

Product:

Biodegradability : Remarks: Not readily biodegradable.



Borlink LE4912

Version 1.0 Revision Date 05/14/2021 Former date -

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Does not accumulate in organisms.

Mobility in soil

Product:

Mobility : Remarks: Not expected to adsorb on soil.

Remarks: The product is insoluble and floats on water.

Other adverse effects

Product:

Additional ecological

information

: Should not be released into the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : This substance, when discarded or disposed of is not

specifically listed as a hazardous waste in Federal regulations.

However, it could be hazardous if it is considered toxic,

corrosive, ignitable or reactive according to Federal definitions

(40 CFR 261). Additionally, it could be designated as

hazardous waste if it is mixed with or comes in contact with a hazardous waste. If such contact or mixing may have

occurred, check 40 CFR 261 to determine whether it is a

hazardous waste.

The transportation, storage, treatment and disposal of this waste material must be conducted in accord-ance with all

applicable Federal, state and local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good



Borlink LE4912

Version 1.0 Revision Date 05/14/2021 Former date -

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

49 CFR

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

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

Borealis certifies that all chemical substances in this shipment comply with all applicable rules or orders under TSCA and that Borealis is not offering a chemical substance for entry in violation of TSCA or any applicable rule or order under TSCA.

The product is classified and labelled in accordance with Hazard Communication Standard 2012 (29 CFR 1910.1200)

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

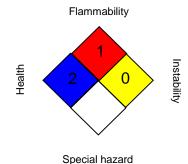


Borlink LE4912

Version 1.0 Revision Date 05/14/2021 Former date -

Further information

NFPA:



HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Sources of key data used to compile the Safety Data

Sheet

The classification information of components is based on raw

material supplier data.

Revision Date : 05/14/2021

Disclaimer

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however we do not assume any liability whatsoever for the accuracy and completeness of such information.

BOREALIS MAKES NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION CONTAINED HEREIN. NOTHING HEREIN SHALL CONSTITUTE ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IT IS THE CUSTOMER'S RESPONSIBILITY TO INSPECT AND TEST OUR PRODUCTS IN ORDER TO SATISFY ITSELF AS TO THE SUITABILITY OF THE PRODUCTS FOR THE CUSTOMER'S PARTICULAR PURPOSE. THE CUSTOMER IS RESPONSIBLE FOR THE APPROPRIATE, SAFE AND LEGAL USE, PROCESSING AND HANDLING OF OUR PRODUCTS.

No liability can be accepted in respect of the use of Borealis' products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.

