

SAFETY DATA SHEET

LE4433

Version 1

Revision Date 08/13/2015

Print Date 08/14/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : LE4433

Manufacturer or supplier's details

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

E-mail address : sds@borealisgroup.com

Emergency telephone number : Borealis Compounds Inc, William E Wallace: +1 908 850 6243

SECTION 2. HAZARDS IDENTIFICATION


Emergency Overview

Appearance	pellets
Colour	black
Odour	odourless
Hazard Summary	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 - see chapter 16) is released. In contact with water or moisture methanol will be released. 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. The product burns, but is not classified as flammable.

GHS-Classification

Specific target organ toxicity - repeated exposure : Category 2

GHS-Labeling

Hazard pictograms : 

Signal word : Warning

Hazard statements : H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements : **Prevention:**

SAFETY DATA SHEET

LE4433

Version 1

Revision Date 08/13/2015

Print Date 08/14/2015

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

Response:

P314 Get medical advice/ attention if you feel unwell.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

Aggravated Medical Condition : None known.

Symptoms of Overexposure : Inhalation may provoke the following symptoms:
Headache
Irritation

Symptoms of poisoning (methanol):

Daze
Dizziness
Nausea
Abdominal pain
Respiratory disorders

Symptoms of poisoning, prolonged exposure (methanol):
Blindness

Carcinogenicity:

IARC	Group 2B: Possibly carcinogenic to humans	
ACGIH	Carbon black	1333-86-4
OSHA	None known.	
NTP	None known.	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical Name	CAS-No.	Concentration [%]
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs	68610-51-5	< 10
Stannane, dioctylbis[(1-oxododecyl)oxy]-	3648-18-8	< 2.5

SECTION 4. FIRST AID MEASURES

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

In case of skin contact : Cool melted product on skin with plenty of water. Do not

SAFETY DATA SHEET

LE4433

Version 1

Revision Date 08/13/2015

Print Date 08/14/2015

remove solidified product.

If swallowed : Get medical advice/ attention if you feel unwell.

Most important symptoms and effects, both acute and delayed : Inhalation may provoke the following symptoms:
Headache
Irritation

Symptoms of poisoning (methanol):

Daze

Dizziness

Nausea

Abdominal pain

Respiratory disorders

Symptoms of poisoning, prolonged exposure (methanol):

Blindness

Notes to physician : No specific instructions needed.

SECTION 5. FIREFIGHTING MEASURES

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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.
Use personal protective equipment.

Environmental precautions : No specific measures identified.
The product is not considered hazardous for 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.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : During processing and thermal treatment of the product, small amounts of volatile hydrocarbons may be released.

SAFETY DATA SHEET

LE4433

Version 1

Revision Date 08/13/2015

Print Date 08/14/2015

Provide adequate ventilation.
Local exhaust ventilation may be necessary.
Avoid inhalation of dust and decomposition fumes.
When using do not eat, drink or smoke.

- Conditions for safe storage : Safety aspects do not require any special precautions in terms of storage.
- Materials to avoid : None known.
- Storage temperature : 10 - 30 °C
- Storage period : 12 Months

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Personal protective equipment

Respiratory protection : In case of insufficient ventilation: Respirator with ABEK-P3 filter or self-contained breathing apparatus.

Hand protection

Material : butyl-rubber
Break through time : >= 480 min
Glove thickness : 0.5 mm

Nitrile rubber
>= 480 min
0.5 mm

Remarks : The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. 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

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Wash hands before breaks and at the end of workday.

SAFETY DATA SHEET

LE4433

Version 1

Revision Date 08/13/2015

Print Date 08/14/2015

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: pellets
Colour	: black
Odour	: odourless
pH	: no data available
Melting range	: 100 - 140 °C
Boiling range	: Not relevant
Flash point	: Not applicable
Evaporation rate	: Not applicable
Flammability (solid, gas)	: The product is not flammable.
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: Not applicable
Relative vapour density	: Not applicable
Density	: 1.1 - 1.2 g/cm ³
Bulk density	: 600 - 700 kg/m ³
Solubility(ies)	
Water solubility	: insoluble
Partition coefficient: n-octanol/water	: Not applicable
Auto-ignition temperature	: > 320 °C
Viscosity	
Viscosity, kinematic	: Not applicable
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. The intended crosslinking reaction occurs in combination with the base resin and moisture: at ambient conditions, in sauna or hot water bath.
Possibility of hazardous	: None known.

SAFETY DATA SHEET

LE4433

Version 1

Revision Date 08/13/2015

Print Date 08/14/2015

reactions
Conditions to avoid : Exposure to moisture

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.
During crosslinking reaction in combination with base resin:
methanol
Hazardous decomposition products: In contact with water or moisture methanol will be released.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : Remarks: Harmful: danger of serious damage to health by prolonged exposure if swallowed.

Acute inhalation toxicity : Remarks: No known effect.

Acute dermal toxicity : Remarks: No known effect.

Components:

Stannane, dioctylbis[(1-oxododecyl)oxy]-:

Acute oral toxicity : LD50 (Rat): 6,450 mg/kg

Skin corrosion/irritation

Product:

Remarks: No known effect.

Serious eye damage/eye irritation

Product:

Remarks: No known effect.

Respiratory or skin sensitisation

Product:

Remarks: No known effect.

SAFETY DATA SHEET

LE4433

Version 1

Revision Date 08/13/2015

Print Date 08/14/2015

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: no data available

Genotoxicity in vivo : Remarks: no data available

Carcinogenicity

Product:

Remarks: Not classified based on available information.

Reproductive toxicity

Product:

Effects on fertility :
Remarks: No known effect.

STOT - single exposure

Product:

Remarks: no data available

STOT - repeated exposure

Product:

Remarks: no data available

Repeated dose toxicity

Components:

Stannane, dioctylbis[(1-oxododecyl)oxy]-:

Application Route: Oral

Target Organs: thymus

Assessment: May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Product:

Not applicable

Further information

Product:

Remarks: 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 - see chapter 16) is released., 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., Carbon black has a workplace exposure limit in some European countries, but is not classified

SAFETY DATA SHEET

LE4433

Version 1

Revision Date 08/13/2015

Print Date 08/14/2015

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : Remarks: No known effect.

Toxicity to daphnia and other aquatic invertebrates : Remarks: No known effect.

Toxicity to algae : Remarks: No known effect.

Toxicity to bacteria : Remarks: No known effect.

Components:

Oxirane, mono[(C12-14-alkyloxy)methyl] derivs:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 0.2 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: No effect up to the limit of solubility.

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 0.2 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: No effect up to the limit of solubility.

Toxicity to algae : EC50 (Selenastrum capricornutum (fresh water algae)): > 0.2 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: No effect up to the limit of solubility.

Persistence and degradability

Product:

Biodegradability : Remarks: Not readily biodegradable.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: no data available

SAFETY DATA SHEET

LE4433

Version 1

Revision Date 08/13/2015

Print Date 08/14/2015

Mobility in soil

Product:

Mobility : Remarks: Not expected to adsorb on soil.

Other adverse effects

Product:

Results of PBT and vPvB assessment : Not applicable

Additional ecological information : The product is not classified as hazardous for 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 accordance with all applicable Federal, state and local regulations.

SECTION 14. TRANSPORT INFORMATION

International Regulation

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

Not applicable for product as supplied.

National Regulations

Special precautions for user

Remarks : The product is not regulated by ADR/RID, IMDG or IATA.

SAFETY DATA SHEET

LE4433

Version 1

Revision Date 08/13/2015

Print Date 08/14/2015

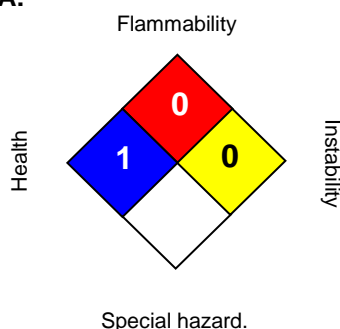
SECTION 15. REGULATORY INFORMATION

All ingredients within this product meet TSCA regulations., In accordance with Hazard Communication Standard 2012 (29 CFR 1910.1200), the product does not need to be classified nor labelled.

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

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.

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

Disclaimer

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SAFETY DATA SHEET

LE4433

Version 1

Revision Date 08/13/2015

Print Date 08/14/2015

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.

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