

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Daplen™ EH227AE-9550

Version 6.0

Revision Date: 21.02.2024

Former date: 06.03.2023

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

#### 1.1 Product identifier

Trade name : Daplen EH227AE-9550

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

Use of the Substance/Mixture : Raw material for plastics industry

#### 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](mailto:sds@borealisgroup.com)

#### 1.4 Emergency telephone number

||+1 760 476 3962 (3E), Access code: 336296

---

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

##### Additional Labelling

EUH208 Contains diamine. May produce an allergic reaction.

EUH210 Safety data sheet available on request.

#### 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.

---

Daplen is a trademark of the Borealis group.

Borealis AG | Trabrennstrasse 6-8 | 1020 Vienna | Austria  
Telephone +43 1 224 00 0 | Fax +43 1 22 400 333  
FN 269858a | CCC Commercial Court of Vienna | Website [www.borealisgroup.com](http://www.borealisgroup.com)



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Daplen EH227AE-9550

Version 6.0

Revision Date: 21.02.2024

Former date: 06.03.2023

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.

### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

Chemical nature : The product is an elastomer modified polypropylene.  
It contains talc.  
It contains carbon black.

#### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
titaniumdioxide	13463-67-7 236-675-5 01-2119489379-17	Carc. 2; H351	>= 0,1 - < 1
N,N,N,N-tetrakis(4,6-bis(butyl-(N-methyl-2,2,6,6-tetramethyl piperidin-4-yl)amino)triazin-2-yl)-4,7-diazadecane-1,10-diamine	106990-43-6 401-990-0 613-078-00-1 01-0000015180-83	Skin Sens. 1; H317 Aquatic Chronic 2; H411 STOT RE 2; H373	>= 0,25 - < 1
bis(2,2,6,6-tetramethyl-4-piperidinyl)decanedioate	52829-07-9 258-207-9	Eye Dam. 1; H318 Repr. 2; H361f Aquatic Acute 1; H400 Aquatic Chronic 2; H411  M-Factor (Acute aquatic toxicity): 1	>= 0,1 - < 0,25
Substances with a workplace exposure limit :			
magnesium silicate	14807-96-6 238-877-9		>= 20 - < 30

For explanation of abbreviations see section 16.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Daplen EH227AE-9550

Version 6.0

Revision Date: 21.02.2024

Former date: 06.03.2023

### SECTION 4: First aid measures

#### 4.1 Description of 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.

#### 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.
- Skin contact may provoke the following symptoms:  
Local irritation
- Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

#### 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.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Daplen EH227AE-9550

Version 6.0

Revision Date: 21.02.2024

Former date: 06.03.2023

### 5.3 Advice for firefighters

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

---

## 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

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.

### 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.  
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.  
The product contains small amounts of a substance classified as sensitising, which may produce an allergic reaction to susceptible personnel.  
Personnel sensitised to this substance should not be allowed to handle the product.

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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Daplen EH227AE-9550

Version 6.0

Revision Date: 21.02.2024

Former date: 06.03.2023

surfaces.

Hygiene measures : When using do not eat, drink or smoke. Wash hands before breaks and at the end of workday.

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

Requirements for storage areas and containers : Safety aspects do not require any special precautions in terms of storage.

Further information on storage stability : Keep in a dry place.

### 7.3 Specific end use(s)

Specific use(s) : Raw material for automotive applications.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

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

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

Substance name	End Use	Exposure routes	Potential health effects	Value
N,N,N,N-tetrakis(4,6-bis(butyl-(N-methyl-2,2,6,6-tetramethyl piperidin-4-yl)amino)triazin-2-yl)-4,7-diazadecane-1,10-diamine	Workers	Inhalation	Long-term	0,36 mg/kg
	Workers	Dermal	Long-term	0,05 mg/kg
	Consumers	Dermal	Long-term	0,025 mg/kg
	Consumers	Oral	Long-term	0,025 mg/kg

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

Substance name	Environmental Compartment	Value
N,N,N,N-tetrakis(4,6-bis(butyl-(N-methyl-2,2,6,6-tetramethyl piperidin-4-yl)amino)triazin-2-yl)-4,7-diazadecane-1,10-diamine	Fresh water	0,06 mg/l
	Marine water	0,006 mg/l
	Fresh water sediment	28,3 mg/kg
	Marine sediment	2,83 mg/kg

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Daplen EH227AE-9550

Version 6.0

Revision Date: 21.02.2024

Former date: 06.03.2023

### 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
- Remarks : Protective gloves complying with EN 374.  
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.
- Skin and body protection : Protective clothing
- Respiratory protection : In case of insufficient ventilation: Respirator with ABEK-P3 filter or self-contained breathing apparatus.
- Protective measures : Appropriate personal protective equipment (PPE) shall be worn in accordance with Regulation (EU) 2016/425.

#### Environmental exposure controls

- General advice : 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.

---

## 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 : 130 - 170 °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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Daplen EH227AE-9550

Version 6.0

Revision Date: 21.02.2024

Former date: 06.03.2023

Flash point	:	Not applicable, (solid)
Auto-ignition temperature	:	320 °C
pH	:	Not applicable insoluble
Viscosity		
Viscosity, kinematic	:	No data available
Solubility(ies)		
Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	Not applicable insoluble
Vapour pressure	:	Not applicable (solid)
Density	:	1,1 - 1,2 g/cm <sup>3</sup>
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.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : None known.

### 10.4 Conditions to avoid

Conditions to avoid : Extremes of temperature and direct sunlight.

---

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Daplen EH227AE-9550

Version 6.0

Revision Date: 21.02.2024

Former date: 06.03.2023

### 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.

---

## 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.

#### Components:

##### **bis(2,2,6,6-tetramethyl-4-piperidinyloxy)decane-1,10-diol:**

Acute oral toxicity : LD50 (Rat): 3.700 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0,5 mg/l  
Exposure time: 4 h

Acute dermal toxicity : LD50 (Rat): > 3.170 mg/kg

#### **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.

#### Product:

Remarks : The product contains small amounts of a substance classified as sensitising, which may produce an allergic reaction to susceptible personnel.  
Personnel sensitised to this substance should not be allowed to handle the product.



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Daplen EH227AE-9550

Version 6.0

Revision Date: 21.02.2024

Former date: 06.03.2023

### 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

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.

## 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 : The product is not classified as hazardous to human health. Information given is based on data of the components.

Remarks : Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

---

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Components:

#### **bis(2,2,6,6-tetramethyl-4-piperidinyl)decanedioate:**

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 0,57 mg/l

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Daplen EH227AE-9550

Version 6.0

Revision Date: 21.02.2024

Former date: 06.03.2023

aquatic invertebrates                      Exposure time: 48 h  
Test Type: Short term

M-Factor (Short-term (acute)        : 1  
aquatic hazard)

Toxicity to daphnia and other        : EC50: 0,96 mg/l  
aquatic invertebrates                   Exposure time: 21 d  
(Chronic toxicity)                        Species: Daphnia magna (Water flea)

### 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.

Remarks: The product is insoluble and sinks in water.

### 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 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.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Daplen EH227AE-9550

Version 6.0

Revision Date: 21.02.2024

Former date: 06.03.2023

### 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.  
Reuse or recycle if not contaminated.  
Check with local regulations.

Contaminated packaging : 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

### 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.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Daplen EH227AE-9550

Version 6.0

Revision Date: 21.02.2024

Former date: 06.03.2023

### SECTION 15: Regulatory information

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

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.  
Not applicable

#### 15.2 Chemical safety assessment

no

### SECTION 16: Other information

#### Full text of H-Statements

H317 : May cause an allergic skin reaction.  
H318 : Causes serious eye damage.  
H351 : Suspected of causing cancer if inhaled.  
H361f : Suspected of damaging fertility.  
H373 : May cause damage to organs through prolonged or repeated exposure.  
H400 : Very toxic to aquatic life.  
H411 : Toxic to aquatic life with long lasting effects.

#### Full text of other abbreviations

Aquatic Acute : Short-term (acute) aquatic hazard  
Aquatic Chronic : Long-term (chronic) aquatic hazard  
Carc. : Carcinogenicity  
Eye Dam. : Serious eye damage  
Repr. : Reproductive toxicity  
Skin Sens. : Skin sensitisation  
STOT RE : Specific target organ toxicity - repeated exposure

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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Daplen EH227AE-9550

Version 6.0

Revision Date: 21.02.2024

Former date: 06.03.2023

### 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.