

# Safety Data Sheet

## Tinuvin® 292

Revision date : 2016/08/29

Version: 2.0

Page: 1/11

(30094960/SDS\_GEN\_CA/EN)

### 1. Identification

#### Product identifier used on the label

## Tinuvin® 292

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

Recommended use\*: stabilizer; polyurethane component

Unsuitable for use: This material is not intended for use in products for which prolonged contact with mucous membranes, body fluids or abraded skin, or implantation within the human body, is specifically intended, unless the finished product has been tested in accordance with nationally and internationally applicable safety testing requirements. Because of the wide range of such potential uses, we are not able to recommend this material as safe and effective for such uses and assume no liability for such uses.

Suitable for use in industrial sector: Polymers industry; chemical industry

\* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

#### Details of the supplier of the safety data sheet

##### Company:

BASF Canada Inc.  
100 Milverton Drive  
Mississauga, ON L5R 4H1, CANADA

Telephone: +1 289 360-1300

#### Emergency telephone number

CANUTEC (reverse charges): (613) 996-6666  
BASF HOTLINE: (800) 454-COPE (2673)

#### Other means of identification

Chemical family: Sterically hindered amine light stabilizer

---

### 2. Hazards Identification

#### According to Hazardous Products Regulations (HPR) (SOR/2015-17)

##### Classification of the product

Skin Sens.	1A	Skin sensitization
Aquatic Acute	1	Hazardous to the aquatic environment - acute

# Safety Data Sheet

## Tinuvin® 292

Revision date : 2016/08/29  
Version: 2.0

Page: 2/11  
(30094960/SDS\_GEN\_CA/EN)

Aquatic Chronic

1

Hazardous to the aquatic environment - chronic

### Label elements

Pictogram:



Signal Word:  
Warning

Hazard Statement:

H317 May cause an allergic skin reaction.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280 Wear protective gloves.  
P273 Avoid release to the environment.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P272 Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response):

P333 + P311 If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician.  
P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water.  
P391 Collect spillage.  
P362 + P364 Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point.

### Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

---

## 3. Composition / Information on Ingredients

### According to Hazardous Products Regulations (HPR) (SOR/2015-17)

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
41556-26-7	60.0 - 80.0%	bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate
82919-37-7	10.0 - 30.0%	Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

---

## 4. First-Aid Measures

### Description of first aid measures

**General advice:**

Immediately remove contaminated clothing.

# Safety Data Sheet

## Tinuvin® 292

Revision date : 2016/08/29  
Version: 2.0

Page: 3/11  
(30094960/SDS\_GEN\_CA/EN)

### **If inhaled:**

Keep patient calm, remove to fresh air, seek medical attention.

### **If on skin:**

Remove contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. If irritation develops, seek medical attention.

### **If in eyes:**

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If irritation develops, seek medical attention.

### **If swallowed:**

Rinse mouth immediately with water. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting due to aspiration hazard. Seek medical attention.

## **Most important symptoms and effects, both acute and delayed**

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Further important symptoms and effects are so far not known.

## **Indication of any immediate medical attention and special treatment needed**

### Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

---

## **5. Fire-Fighting Measures**

### **Extinguishing media**

Suitable extinguishing media:  
water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons:  
water jet

### **Special hazards arising from the substance or mixture**

Hazards during fire-fighting:  
harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

### **Advice for fire-fighters**

Protective equipment for fire-fighting:  
Wear a self-contained breathing apparatus.

### **Further information:**

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

# Safety Data Sheet

## Tinuvin® 292

Revision date : 2016/08/29  
Version: 2.0

Page: 4/11  
(30094960/SDS\_GEN\_CA/EN)

---

### 6. Accidental release measures

#### **Personal precautions, protective equipment and emergency procedures**

Use personal protective clothing. Keep people away and stay on the upwind side. Breathing protection required.

#### **Environmental precautions**

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

#### **Methods and material for containment and cleaning up**

For large amounts: Pump off product.

For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

---

### 7. Handling and Storage

#### **Precautions for safe handling**

No special measures necessary provided product is used correctly.

Protection against fire and explosion:

No special precautions necessary.

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

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

The packed product is not damaged by low temperatures or by frost.

---

### 8. Exposure Controls/Personal Protection

No occupational exposure limits known.

#### **Personal protective equipment**

##### **Respiratory protection:**

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

##### **Hand protection:**

Chemical resistant protective gloves

##### **Eye protection:**

Safety glasses with side-shields.

##### **Body protection:**

Body protection must be chosen based on level of activity and exposure., Protective coverall and/or impermeable apron and boots as necessary.

##### **General safety and hygiene measures:**

Handle in accordance with good industrial hygiene and safety practice. Handle in accordance with good industrial hygiene and safety practice.

# Safety Data Sheet

## Tinuvin® 292

Revision date : 2016/08/29  
Version: 2.0

Page: 5/11  
(30094960/SDS\_GEN\_CA/EN)

### 9. Physical and Chemical Properties

Form:	liquid	
Odour:	ester-like	
Odour threshold:	No data available.	
Colour:	light yellow	
pH value:	8.4 ( 1 %(m), 20 - 25 °C) (as suspension)	
glass transition temperature:	-57.8 °C ( 1,013 hPa)	(Directive 92/69/EEC, A.1)
boiling temperature:	> 300 °C	(Directive 92/69/EEC, A.2)
Sublimation point:	No data available.	
Flash point:	209.5 °C	(Directive 92/69/EEC, A.9)
Flammability:	not applicable	
Lower explosion limit:	For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Autoignition:	380 °C	(DIN 51794)
Vapour pressure:	0.000001 hPa ( 20 °C)	(OECD Guideline 104)
Density:	0.993 g/cm <sup>3</sup> ( 20 °C)	(OECD Guideline 109)
Relative density:	0.99	(OECD Guideline 109)
Vapour density:	No data available.	
Partitioning coefficient n-octanol/water (log Pow):	2.37 - 2.77 ( 25 °C)	(OECD Guideline 107)
Self-ignition temperature:	Based on its structural properties the product is not classified as self-igniting.	
Thermal decomposition:	325 °C No decomposition if stored and handled as prescribed/indicated.	
Viscosity, dynamic:	400 mPa.s ( 20 °C)	
Viscosity, kinematic:	478 mm <sup>2</sup> /s ( 20 °C)	(Capillary viscometer)
Particle size:	The substance / product is marketed or used in a non solid or granular form.	
% volatiles:	0.5 %	
Solubility in water:	21.5 - 29.8 mg/l ( 21 °C)	
Solubility (qualitative):	miscible solvent(s): organic solvents,	
Molar mass:	508.79 g/mol	
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.	

# Safety Data Sheet

## Tinuvin® 292

Revision date : 2016/08/29  
Version: 2.0

Page: 6/11  
(30094960/SDS\_GEN\_CA/EN)

Other Information: If necessary, information on other physical and chemical parameters is indicated in this section.  
Tested as preparation

### 10. Stability and Reactivity

#### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:  
No corrosive effect on metal.

Oxidizing properties:  
Based on its structural properties the product is not classified as oxidizing.

Minimum ignition energy:

No data available.

Reactions with water/air:	Reaction with:	water
---------------------------	----------------	-------

Flammable gases:	no
Toxic gases:	no
Corrosive gases:	no
Smoke or fog:	no
Peroxides:	no

Reaction with:	air
Flammable gases:	no
Toxic gases:	no
Corrosive gases:	no
Smoke or fog:	no
Peroxides:	no

Formation of flammable gases:	Remarks:	Forms no flammable gases in the presence of water.
-------------------------------	----------	--

#### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

#### Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.  
The product is chemically stable.

#### Conditions to avoid

No special precautions other than good housekeeping of chemicals.

#### Incompatible materials

strong acids, strong bases, strong oxidizing agents

#### Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

# Safety Data Sheet

## Tinuvin® 292

Revision date : 2016/08/29  
Version: 2.0

Page: 7/11  
(30094960/SDS\_GEN\_CA/EN)

325 °C

No decomposition if stored and handled as prescribed/indicated.

### 11. Toxicological information

#### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

#### Acute Toxicity/Effects

##### Acute toxicity

Assessment of acute toxicity: Of low toxicity after single ingestion.

##### Oral

Type of value: LD50

Species: rat

Value: 3,230 mg/kg (Conventional method)

##### Inhalation

not determined

##### Dermal

not determined

##### Assessment other acute effects

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

##### Irritation / corrosion

Assessment of irritating effects: Not irritating to eyes and skin.

##### Skin

Species: rabbit

Result: non-irritant

Method: OPP 81-5 (EPA-Guideline)

##### Eye

Species: rabbit

Result: non-irritant

##### Sensitization

Species: guinea pig

Result: sensitizing

Method: OECD Guideline 406

##### Aspiration Hazard

No aspiration hazard expected.

#### Chronic Toxicity/Effects

##### Repeated dose toxicity

Assessment of repeated dose toxicity: No known chronic effects.

# Safety Data Sheet

## Tinuvin® 292

Revision date : 2016/08/29  
Version: 2.0

Page: 8/11  
(30094960/SDS\_GEN\_CA/EN)

### Genetic toxicity

Assessment of mutagenicity: Based on the ingredients, there is no suspicion of a mutagenic effect.  
Genetic toxicity in vitro: Ames-test negative

### Carcinogenicity

Assessment of carcinogenicity: None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen.  
The whole of the information assessable provides no indication of a carcinogenic effect.

### Reproductive toxicity

Assessment of reproduction toxicity: Based on the ingredients, there is no suspicion of a toxic effect on reproduction.

### Experiences in humans

Sensitizing effects by skin contact.

### Other Information

Tested as a preparation.

## **Symptoms of Exposure**

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Further important symptoms and effects are so far not known.

---

## **12. Ecological Information**

### **Toxicity**

#### Aquatic toxicity

Assessment of aquatic toxicity:

May cause long-term adverse effects in the aquatic environment.

Very toxic (acute effect) to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

#### Toxicity to fish

LC50 (96 h) 0.97 mg/l, *Lepomis macrochirus* (OECD Guideline 203)

LC50 (96 h) 7.9 mg/l, *Oncorhynchus mykiss* (OECD Guideline 203)

LC50 (96 h) 0.9 mg/l, *Brachydanio rerio* (OECD Guideline 203, semistatic)

The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.

#### Aquatic invertebrates

EC50 (24 h) 20 mg/l, *Daphnia magna* (OECD Guideline 202, part 1)

#### Aquatic plants

EC50 (72 h) 1.68 mg/l (growth rate), *Desmodesmus subspicatus* (OECD Guideline 201, static)

The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.

#### Chronic toxicity to aquatic invertebrates



# Safety Data Sheet

## Tinuvin® 292

Revision date : 2016/08/29  
Version: 2.0

Page: 9/11  
(30094960/SDS\_GEN\_CA/EN)

No observed effect concentration (21 d) 1 mg/l, Daphnia magna (OECD Guideline 211, semistatic)  
The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.

### Microorganisms/Effect on activated sludge

#### Toxicity to microorganisms

OECD Guideline 209 aerobic  
activated sludge, domestic/EC50 (3 h): > 100 mg/l

### Persistence and degradability

#### Assessment biodegradation and elimination (H<sub>2</sub>O)

Not readily biodegradable (by OECD criteria). Moderately/partially biodegradable.

#### Elimination information

38 % DOC reduction (28 d) (OECD 301F; ISO 9408; 92/69/EEC, C.4-D) (aerobic, aerobic microorganisms)

#### Assessment of stability in water

In contact with water the substance will hydrolyse slowly.

### Bioaccumulative potential

#### Assessment bioaccumulation potential

Accumulation in organisms is not to be expected.

### Mobility in soil

#### Assessment transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface.  
Adsorption to solid soil phase is expected.

### Additional information

Other ecotoxicological advice:

Do not allow to enter soil, waterways or waste water channels. Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

---

## 13. Disposal considerations

### **Waste disposal of substance:**

Dispose of in accordance with national, state and local regulations. Do not discharge into drains/surface waters/groundwater.

### **Container disposal:**

Uncontaminated packaging can be re-used. Packs that cannot be cleaned should be disposed of in the same manner as the contents.

---

## 14. Transport Information

### **Land transport**

TDG

# Safety Data Sheet

## Tinuvin® 292

Revision date : 2016/08/29  
Version: 2.0

Page: 10/11  
(30094960/SDS\_GEN\_CA/EN)

Hazard class: 9  
Packing group: III  
ID number: UN 3082  
Hazard label: 9, EHSM  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains BIS-(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)SEBACATE)

### Sea transport

#### IMDG

Hazard class: 9  
Packing group: III  
ID number: UN 3082  
Hazard label: 9, EHSM  
Marine pollutant: YES  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains BIS-(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)SEBACATE)

### Air transport

#### IATA/ICAO

Hazard class: 9  
Packing group: III  
ID number: UN 3082  
Hazard label: 9, EHSM  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains BIS-(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)SEBACATE)

---

## 15. Regulatory Information

### Federal Regulations

#### Registration status:

Chemical DSL, CA released / listed

---

## 16. Other Information

### SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2016/08/29

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

# Safety Data Sheet

## Tinuvin® 292

Revision date : 2016/08/29  
Version: 2.0

Page: 11/11  
(30094960/SDS\_GEN\_CA/EN)

---

Tinuvin® 292 is a registered trademark of BASF Canada or BASF SE  
END OF DATA SHEET