

# Safety Data Sheet

## Irganox® B 225

Revision date : 12.05.2010

Version: 1.1

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(30054540/SDU\_GEN\_CA/EN)

### 1. Product and Company Identification

**Company**

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

**24 Hour Emergency Response Information**

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

Chemical family:

Mixture of additives for plastic material stabilization

### 2. Hazards Identification

**Emergency overview**

Signal word: NOTICE! !  
Colour: White to off-white  
Appearance: powder  
State of matter: solid  
Odour: odourless  
Health: May cause mechanical irritation to eyes, skin and respiratory system.  
Physical/Chemical hazards: Refer to MSDS Section 7 for Dust Explosion information.

**Potential health effects****Primary routes of entry:**

Skin, Inhalation, Eyes

**Potential environmental effects**

The aquatic toxicity of this product has not been fully assessed. Releases to the environment are to be avoided.

### 3. Composition/Information on Ingredients

<u>Chemical name</u>	<u>CAS Number</u>	<u>Content (Weight)</u>	<u>Hazardous</u>
Confidential Stabilizer	Trade Secret	30.0 - 60.0 %	N
Proprietary antioxidant	Trade Secret	30.0 - 60.0 %	N

This material does not contain any hazardous components that are reportable according to WHMIS criteria.

### 4. First-aid Measures

**Inhalation:**

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Remove to fresh air, if not breathing give artificial respiration. If breathing is difficult, give oxygen and get immediate medical attention.

### **Skin:**

After contact with skin, wash immediately with plenty of water and soap.  
Get medical attention if irritation occurs.

### **Eyes:**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

### **Ingestion:**

Do not induce vomiting. If vomiting occurs naturally, have casualty lean forward to reduce the risk of aspiration. Seek medical attention immediately.

### **Notes to physician:**

None known

## 5. Fire-fighting Measures

### **Suitable extinguishing media:**

carbon dioxide, dry powder, foam, water fog

### **Hazardous combustion products:**

Burning may produce toxic combustion products., Phosphorus oxides, Carbon oxides.

### **Hazards during fire-fighting:**

Standard procedure for chemical fires.

The product can form an explosive dust/air mixture. For further information, see Section 7 Explosion Hazards.

### **Protective equipment for fire-fighting:**

Wear self-contained breathing apparatus and chemical-protective clothing.

## 6. Accidental Release Measures

### **Cleanup:**

Sweep up and shovel into suitable containers for disposal.

Avoid raising dust.

Wear suitable protective equipment.

Should not be released into the environment.

## 7. Handling and Storage

### **Handling**

#### **General advice:**

As with all industrial chemicals, use good industrial practices when handling. Avoid eye, skin, and clothing contact. Do not inhale. Do not taste or swallow. Use only with adequate ventilation.

Take precautionary measures against electrostatic discharge.

#### **Protection against fire and explosion:**

Combustible powder. - Avoid creating dusty conditions. - Grounding is required when emptying into a conductive container. - When flammable solvents are present, the container must be inerted or the system otherwise designed to prevent or contain an explosion. Seek expert advice. In addition, for products packaged in fused-lined (coated) fiber drums, fiber drums with conductive liners, steel drums, steel pails, and Type " C "

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FIBC (bulk bags), or other conductive the following instructions also apply: - Always ground this package before emptying. The user is responsible for designing the system to handle solid and ensuring proper training of employees in the system's use.

### Storage

#### **General advice:**

Keep container tightly closed in a dry, cool and well-ventilated place.

> for industrial use only <

## 8. Exposure Controls and Personal Protection

### Exposure Guidelines

Confidential Stabilizer	CIEL	8h TWA: 5.0 mg/m3 (Inhalable) Precautionary CIEL assigned for aryl phosphite
Proprietary antioxidant	CIEL	8h TWA: 10 mg/m3 (Inhalable) General exposure limit for inhalable particulate matter

#### **Engineering Controls:**

Work in well ventilated areas. Do not breathe dust.

### Personal protective equipment

#### **Respiratory protection:**

Wear a NIOSH-certified respirator as necessary.

#### **Eye protection:**

Wear safety goggles (chemical goggles) if there is potential for airborne dust exposures.

#### **Body protection:**

Wear chemical resistant gloves and protective clothing.

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

There are no OSHA or ACGIH exposure guidelines available for component(s) in this product.

## 9. Physical and Chemical Properties

Colour:	White to off-white	
Form:	powder	
State of matter:	solid	
Odour:	odourless	
pH value:		Not tested
Flammability:	Not tested	
Flash point:		Not tested
Self-ignition temperature:		Not tested
Dust explosion class:	Heavy Dust Explosion. (2)	
Melting point:		Not tested
Boiling point:		Not tested
Vapour pressure:		Not tested
Density:		Not tested
Partitioning coefficient n-octanol/water (log Pow):		Not tested

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% Volatiles:	0.5 %	
Solubility in water:		Not tested
Solubility in other solvents:		Not tested
Decomposition temperature:	> 350 °C	(Temperature program (Lütolf))

### 10. Stability and Reactivity

#### Stability:

Stable

Conditions to avoid: Avoid electro-static discharge. Avoid sources of ignition.

Substances to avoid: Strong oxidizing agents, strong acids, strong bases.

Possibility of Hazardous Reactions: No hazardous reactions known.

Hazardous decomposition products: No decomposition expected under normal storage conditions.

### 11. Toxicological Information

#### Acute oral toxicity:

LD50 / oral / rat: > 2,000 mg/kg

#### Acute inhalation toxicity:

Not tested

LC50 / by inhalation / rat: > 1,951.000000 mg/l  
*Information on: Proprietary antioxidant*

#### Acute dermal toxicity:

LD50 / dermal / rat: > 2,000 mg/kg

#### Skin irritation:

(Rabbits) Not an irritant.

#### Eye irritation:

(Rabbits) Not an irritant.

#### Skin Sensitization:

Sensitization / guinea pig:

Not a sensitizer. (based on known component information)

*Information on: Confidential Stabilizer*  
(Guinea Pig) Optimization Test: Not a sensitizer.

*Information on: Proprietary antioxidant*  
(Guinea Pig) Not a sensitizer.

#### Subacute toxicity:

not determined

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### Subchronic Toxicity:

*Information on: Confidential Stabilizer*

*3-Month Toxicity Study (Rats): The NOEL was 500 mg/day. Relative and absolute kidney weights of the females increased in the higher dose group, which persisted until the end of the recovery period. [par [par3-Month Dietary Toxicity Study (Dogs): The NOEL was at least 318 mg/kg/day. No test substance related changes were observed.*

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### Subchronic Toxicity:

*Information on: Proprietary antioxidant*

*The test substance was administered by incorporation into the diet to albino rats at concentrations of 0, 2,000, 10,000 and 50,000 ppm for 90 days. No significant abnormalities were seen among parameters such as growth, food consumption, mortality, behavioral patterns, hematology, clinical blood chemistry, urinalysis, organ weight data and gross and microscopic pathology. The no-observable effect level (NOEL) was 50,000 ppm, equivalent to 2,500 mg/kg/day. The test substance was administered by incorporation into the diet to groups of Beagle dogs at concentrations of 0, 1,000 and 10,000 ppm for 3 months. There were no deaths during the study. Growth rates and food consumption were within normal limits in all groups. There were no relevant changes in laboratory parameters(hematology, clinical chemistry and urinalysis) and no treatment related changes were seen at autopsy or on histopathological examination. The NOEL was 10,000 ppm, corresponding to an average intake of 322 mg/kg/day.*

### Chronic toxicity:

*Information on: Proprietary antioxidant*

*(Mice) No treatment-related changes were seen in any of the measured endpoints, including tumor formation. The NOEL was 1000 ppm ( approx. 116 mg/kg/day).*

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### Genetic toxicity:

Non-mutagenic (based on composition).

*Information on: Proprietary antioxidant*

Generally no effect, possible minor irritant

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*Information on: Confidential Stabilizer*

Generally no effect, possible minor irritant

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### 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.

*Information on: Proprietary antioxidant*

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*Information on: Confidential Stabilizer*

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### Reproductive toxicity:

*Information on: Proprietary antioxidant*

*The test substance was added to the diet of Charles River rats at levels of 0, 1,000, 3,000 and 10,000 ppm throughout two generations. No death occurred amongst adult animals of either the FO or F1 generation nor were there any consistent effects which could be attributed to the treatment. There were no adverse effects on litters of treated parents in either generation. The findings of this study indicate that, under the conditions*

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*of the test, the treated animals showed no substantial differences from their control counterparts and that their reproductive capacity was not impaired.*

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### *Information on: Confidential Stabilizer*

*2-Generation Reproductive Study (Rats): Male and female albino rats received a diet containing 0, 114, 285.7 and 714 mg/kg/day. All doses were well tolerated with respect to general toxic effects. The high dose caused a slight reduction of the fertility rate in F0 parental animals. However, this observation was not seen in the F1 parents, implying that it may have occurred just by chance and was not treatment related. No other parameters were adversely affected. The no-observable effect level (NOEL) was 285.7 mg/kg/day.*

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### **Developmental toxicity/teratogenicity:**

No evidence of teratogenic or embryotoxic effects when pregnant rats and mice were dosed at levels up to and including 1000 mg/kg by gavage from day 6 through 15 of pregnancy.

NOEL = 10,000 ppm, in diet, for all endpoints over two generations of parents, litters, and offspring.

(Rabbits): No embryotoxic or teratogenic effects observed for dose levels of 0, 200, 600, and 1,200 mg/kg given by gavage on gestation days 6-18.

### *Information on: Proprietary antioxidant*

*No evidence of teratogenic or embryotoxic effects when pregnant rats and mice were dosed at levels up to and including 1000 mg/kg by gavage from day 6 through 15 of pregnancy.*

*(Rats)*

*NOEL = 10,000 ppm, in diet, for all endpoints over two generations of parents, litters, and offspring.*

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### *Information on: Confidential Stabilizer*

*(Rabbits): No embryotoxic or teratogenic effects observed for dose levels of 0, 200, 600, and 1,200 mg/kg given by gavage on gestation days 6-18.*

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### **Additional Information:**

The toxicological data is based on the known properties of the components.

### **Neurotoxicity:**

For one of the components:

:

### *Information on: Confidential Stabilizer*

*White leghorn hen - No signs of neurotoxicity.*

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## 12. Ecological Information

### **Toxicity to fish:**

Not tested

### **Toxicity to aquatic invertebrates:**

Not tested

### **Toxicity to aquatic plants:**

Not tested

### **Toxicity to microorganisms:**

Not tested

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### Biodegradation:

Not tested

## 13. Disposal Considerations

### Waste disposal of substance:

Dispose of in accordance with national, state and local regulations.

## 14. Transport Information

### TDG (Canada) Road transport

Special shipping information: Not classified as a dangerous good under transport regulations.

### International Air Transport Association (IATA)

Special shipping information: Not classified as a dangerous good under transport regulations.

### International Maritime Dangerous Goods Code (IMDG)

Special shipping information: Not classified as a dangerous good under transport regulations.

## 15. Regulatory Information

Canada: Domestic Substances List (DSL):

All components either exempt or listed on the DSL

US: Toxic Substances Control Act (TSCA):

All component(s) comprising this product are either exempt or listed on the TSCA inventory

### Canada Regulations

#### **Workplace Hazardous Materials Information System (WHMIS Classification):**

This product is not WHMIS controlled.

#### **Significant New Activity Conditions (SNAC):**

This product does not contain any components subject to a SNAC Notice.

### International Regulations

#### **Chemical Weapons Convention:**

This product does not contain any component(s) listed under the Chemical Weapons Convention Schedule of Chemicals.

## 16. Other Information

### **Product Safety Contact:**

Prepared by:

Terence Ma (905) 812-7280

Date / Revised:

Generation date

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

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Due to the merger of CIBA and BASF Group all Material Safety Data Sheets have been reassessed on the basis of consolidated information. This may have resulted in changes of the Material Safety Data Sheets. In case you have questions concerning such changes please contact us at the address mentioned in Section I.

END OF DATA SHEET