

Revision date : 2012/10/18 Page: 1/8
Version: 2.1 (30605526/SDS 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)

2. Hazards Identification

Emergency overview

IRRITANT.
CONTAINS MATERIAL WHICH CAN CAUSE CANCER.
Irritating to eyes and skin.

State of matter: solid Colour: grey Odour: mild

Potential health effects

Acute toxicity:

Product may present a nuisance dust hazard. Inhalation of dust may cause respiratory tract irritation, coughing and breathing difficulties.

Irritation / corrosion:

Causes temporary irritation of the respiratory tract. Skin contact causes irritation. May cause severe damage to the eyes. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Sensitization:

Chromate in this product has been reduced. Sensitization due to chromate within stated shelf-live is unlikely.

Chronic toxicity:

Repeated dose toxicity: After repeated exposure the prominent effect is local irritation. The product has not been tested. The statement has been derived from the properties of the individual components.

Teratogenicity: The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

Revision date : 2012/10/18 Page: 2/8 Version: 2.1 (30605526/SDS GEN CA/EN)

Genotoxicity: The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

Signs and symptoms of overexposure:

Eye irritation, skin irritation, irritation of the mucous membranes

Potential environmental effects

Aquatic toxicity:

The product gives rise to pH shifts.

Degradation / environmental fate:

Inorganic product which cannot be eliminated from water by biological purification processes. The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.

3. Composition / Information on Ingredients

CAS Number	Content (W/W)	Hazardous ingredients
14808-60-7	>= 40.0 - <= 70.0 %	crystalline silica
65997-15-1	>= 30.0 - <= 60.0 %	Cement, portland, chemicals
112945-52-5	>= 1.0 - <= 5.0 %	Silica
1305-78-8	>= 1.0 - <= 5.0 %	calcium oxide
13397-24-5	>= 1.0 - <= 5.0 %	Gypsum (Ca(SO4).2H2O)
1317-65-3	>= 0.5 - <= 1.5 %	Limestone

4. First-Aid Measures

General advice:

First aid personnel should pay attention to their own safety. Remove contaminated clothing.

If inhaled

After inhalation of dust. Keep patient calm, remove to fresh air. If difficulties occur: Obtain medical attention.

If on skin:

After contact with skin, wash immediately with plenty of water and soap. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:

Rinse mouth immediately and then drink plenty of water, seek medical attention. Do not induce vomiting unless told to by a poison control center or doctor.

5. Fire-Fighting Measures

Flash point: Non-flammable.

Flammability: does not ignite

Suitable extinguishing media:

foam, water spray, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons:

water jet

Revision date: 2012/10/18 Page: 3/8
Version: 2.1 (30605526/SDS GEN CA/EN)

Additional information:

Product itself is non-combustible. Only the packaging materials can catch fire. The extinguishing agents normally used are sufficient.

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire. Product is not combustible or explosive.

Protective equipment for fire-fighting:

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

Further information:

Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered. The degree of risk is governed by the burning substance and the fire conditions. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions:

Avoid dust formation. Avoid contact with skin and eyes. Use personal protective clothing. Handle in accordance with good building materials hygiene and safety practice.

Environmental precautions:

Do not discharge into drains/surface waters/groundwater.

Cleanup:

Avoid raising dust.

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Pick up with suitable appliance and dispose of. Pack in tightly closed containers for disposal. For residues: Rinse with plenty of water.

7. Handling and Storage

<u>Handling</u>

General advice:

Avoid dust formation. The Cement contained in this product reacts alkaline when in contact with water or humidity. This may cause severe irritation of skin or mucous membranes. The humidity of the skin or mucous membranes is enough for this reaction. Prolonged direct contact to the dry product should be avoided therefore. Avoid inhalation of dusts. Avoid skin contact. Pour downwind and allow as little free fall as possible while emptying bags into equipment. Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Protection against fire and explosion:

No special precautions necessary.

Storage

General advice:

Containers should be stored tightly sealed in a dry place.

Storage incompatibility:

General advice: Segregate from metals. Segregate from acids. Segregate from lyes. Segregate from oxidants. Segregate from foods and animal feeds.

8. Exposure Controls and Personal Protection

Components with occupational exposure limits

Revision date : 2012/10/18	Page: 4/8
Version: 2.1	(30605526/SDS_GEN_CA/EN)

ersion: 2.1		Page: 4/8 (30605526/SDS_GEN_CA/EN)
Cement, portland, chemicals	OSHA ACGIH	PEL 5 mg/m3 Respirable fraction; PEL 15 mg/m3 Total dust; TWA value 1 mg/m3 Respirable fraction; The value is for particulate matter containing no asbestos and <1% crystalline silica.
calcium oxide crystalline silica	OSHA ACGIH OSHA	PEL 5 mg/m3; TWA value 2 mg/m3; TWA value 2.4 millions of particles per cubic foot of air Respirable; The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation. TWA value 0.1 mg/m3 Respirable; The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation. TWA value 0.3 mg/m3 Total dust; The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.
Cement, portland, chemicals	ACGIH OSHA ACGIH	TWA value 0.025 mg/m3 Respirable fraction; PEL 5 mg/m3 Respirable fraction; PEL 15 mg/m3 Total dust; TWA value 1 mg/m3 Respirable fraction; The value is for particulate matter containing no asbestos and <1% crystalline silica.
calcium oxide Gypsum (Ca(SO4).2H2O) Limestone	OSHA ACGIH OSHA ACGIH OSHA	PEL 5 mg/m3; TWA value 2 mg/m3; PEL 5 mg/m3 Respirable fraction; PEL 15 mg/m3 Total dust; TWA value 10 mg/m3 Inhalable fraction; PEL 5 mg/m3 Respirable fraction; PEL 15 mg/m3 Total dust;
Silica	OSHA	TWA value 20 millions of particles per cubic foot of air ; TWA value 0.8 mg/m3 ; The exposure limit is calculated from the equation, 80/(%SiO2), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits.

Advice on system design:

Provide local exhaust ventilation to maintain recommended P.E.L.

Personal protective equipment

Respiratory protection:

Breathing protection if dusts are formed.

Hand protection:

Chemical resistant protective gloves, Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Tightly fitting safety goggles (chemical goggles).

Body protection:

Body protection must be chosen based on level of activity and exposure.

Revision date : 2012/10/18 Page: 5/8
Version: 2.1 (30605526/SDS GEN CA/EN)

General safety and hygiene measures:

Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts. In order to prevent contamination while handling, closed working clothes and working gloves should be used. Handle in accordance with good building materials hygiene and safety practice. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skincare agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

9. Physical and Chemical Properties

Form: powder Odour: mild

Odour threshold: No data available.

Colour: grey

pH value: 13 (20 °C) (as aqueous solution)

Melting point: not applicable

Bulk density: approx. 1,250

kg/m3

Partitioning coefficient n- not applicable

octanol/water (log Pow): Solubility in water: (15 °C)

Solubility in water: $(15 \, ^{\circ}\text{C})$ not soluble Miscibility with water: $(20 \, ^{\circ}\text{C})$ immiscible

10. Stability and Reactivity

Conditions to avoid:

Avoid dust formation. Avoid humidity.

Substances to avoid:

strong acids

strong bases, strong acids

Hazardous reactions:

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

Strong bases are formed on the addition of water.

Decomposition products:

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

Corrosion to metals:

No corrosive effect on metal.

11. Toxicological information

Acute toxicity

Information on: calcium oxide Assessment of acute toxicity:

The toxicity of the product is based on its corrosivity.

Of moderate toxicity after single ingestion.

Irritation / corrosion

Information on: Cement, portland, chemicals

Assessment of irritating effects:

Skin contact causes irritation. May cause severe damage to the eyes.

Information on: calcium oxide

Revision date: 2012/10/18 Page: 6/8
Version: 2.1 (30605526/SDS GEN CA/EN)

Assessment of irritating effects: Corrosive! Damages skin and eyes.

Repeated dose toxicity

Information on: crystalline silica

Assessment of repeated dose toxicity:

Repeated inhalation exposure may affect certain organs. The substance may cause increase in lung mass and lung tissue changes after repeated inhalation.

This product may contain greater than 0.1% crystalline silica. Repeated exposure to high concentrations results in silicosis, a lung disease characterized by coughing, difficult breathing, wheezing, scarring of the lungs, and repeated, non-specific chest illnesses.

Carcinogenicity

Information on: crystalline silica

In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. In long-term animal studies in which the substance was given by inhalation in high doses, a carcinogenic effect was observed. The substance and its compounds in the form of respirable dusts/aerosolsis classified by the German MAK commision as a category 1 carcinogen (substances that cause cancer to humans). A carcinogenic effect cannot safely be ruled out. The inhalation uptake of the alveolar fraction of the fine dust may cause damage to the lungs. The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.

The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.

NTP listed carcinogen

Other Information:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

12. Ecological Information

Degradability / Persistence Biological / Abiological Degradation

Evaluation:

Experience shows this product to be inert and non-degradable.

Other adverse effects:

Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:

Observe national and local legal requirements. Residues should be disposed of in the same manner as the substance/product.

Container disposal:

Completely emptied packagings can be given for recycling.

Revision date: 2012/10/18 Page: 7/8
Version: 2.1 (30605526/SDS GEN CA/EN)

14. Transport Information

Land transport

TDG

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Chemical DSL, CA released / listed

WHMIS classification: D2A: Materials Causing Other Toxic Effects - Very toxic

material

D2B: Materials Causing Other Toxic Effects - Toxic

material





THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

16. Other Information

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.

MSDS Prepared by:

BASF NA Product Regulations msds@basf.com BASF HOTLINE (800) 454 – COPE (2673) MSDS Prepared on: 2012/10/18

Revision date : 2012/10/18 Page: 8/8
Version: 2.1 (30605526/SDS_GEN_CA/EN)

END OF DATA SHEET