

# Safety Data Sheet

## 28% UAN

Revision date : 2012/06/04

Version: 2.1

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(30458887/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

CAUTION:  
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.  
HARMFUL IF SWALLOWED.

State of matter: liquid  
Colour: colourless to yellow  
Odour: ammonia-like

Potential health effects**Acute toxicity:**

Harmful if swallowed.

**Irritation / corrosion:**

May cause slight irritation to the skin. Irritating to eyes. The statements are based on the properties of the individual components.

**Signs and symptoms of overexposure:**

methaemoglobinaemia, diarrhea, vomiting, dizziness, headache, hypotension, cardiac arrhythmias, cyanosis, paresthesiae  
Danger of methaemoglobin formation after ingestion.

### 3. Composition / Information on Ingredients

| <u>CAS Number</u> | <u>Content (W/W)</u> | <u>Hazardous ingredients</u> |
|-------------------|----------------------|------------------------------|
| 6484-52-2         | 45.2 %               | Ammonium Nitrate             |
| 57-13-6           | 34.8 %               | urea                         |
| 7732-18-5         | 20.0 %               | Water                        |

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### 4. First-Aid Measures

**General advice:**

Immediately remove contaminated clothing.

**If inhaled:**

Keep patient calm, remove to fresh air.

**If on skin:**

Wash thoroughly with soap and water.

**If in eyes:**

Flush with copious amounts of water for at least 15 minutes.

**If swallowed:**

Immediate medical attention required. Do not induce vomiting unless told to by a poison control center or doctor.

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### 5. Fire-Fighting Measures

Flash point:

Non-flammable.

Autoignition:

not determined

**Suitable extinguishing media:**

water spray, dry powder, foam

**Hazards during fire-fighting:**

nitrogen oxides, ammonia oxides

Under fire conditions, some components of this product may decompose. If product is heated above decomposition temperature, toxic vapours will be released. Substance/product may act as an oxidizer. Explosive when dry.

**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.

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### 6. Accidental release measures

**Personal precautions:**

Use personal protective clothing.

**Environmental precautions:**

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

**Cleanup:**

For small amounts: Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder). Dispose of absorbed material in accordance with regulations.

For large amounts: Pump off product.

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### 7. Handling and Storage

#### Handling

##### **General advice:**

Avoid contact with the skin, eyes and clothing. Avoid inhalation of mists/vapours. Segregate from foods and animal feeds. Substance/product is an oxidizing agent after a drying/evaporation of the solvent fraction part.

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

No special precautions necessary.

#### Storage

##### **General advice:**

Keep container tightly closed and dry; store in a cool place. Do not mix or store this product or its solutions in unlined steel or aluminum containers. Protect product from freezing temperatures

### 8. Exposure Controls and Personal Protection

#### Personal protective equipment

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

Wear a NIOSH-certified (or equivalent) amine/organic vapor respirator.

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

Rubber gloves

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

Safety glasses with side-shields. Wear face shield if splashing hazard exists.

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

Impermeable protective clothing

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

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment. Handle in accordance with good industrial hygiene and safety practice.

### 9. Physical and Chemical Properties

Form: liquid  
Odour: ammonia-like  
Odour threshold: No data available.  
Colour: colourless to yellow  
pH value: 6.3 - 7.2  
Melting point: -17 °C  
Boiling point: 122 °C

*Information on: Ammonium Nitrate*

Vapour pressure:

The substance / product decomposes therefore not determined., Study scientifically not justified.

*Information on: urea*

Vapour pressure: < 0.000016 hPa ( 25 °C) (measured)

*Information on: Water*

Vapour pressure: 23.4 hPa ( 20 °C) Literature data.

Density: 1.28 - 1.327 g/cm3 ( 16 °C)

Relative density: 1.28 - 1.327 ( 16 °C)

*Information on: urea*

Partitioning coefficient n-octanol/water (log Pow): -1.73 ( 20 °C) (Directive 92/69/EEC, A.8)

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Solubility in water:

fully soluble

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### 10. Stability and Reactivity

#### Conditions to avoid:

Avoid drying-out. See MSDS section 7 - Handling and storage. Avoid excessive temperatures. Avoid evaporation/volatilization of the solvent. Avoid friction to dry powdered substance/product.

#### Substances to avoid:

chlorine, strong acids, hypochlorites, flammable, oxidizable substances, combustible materials, metal powder

#### Hazardous reactions:

Stable under normal conditions.

#### Decomposition products:

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

#### Corrosion to metals:

Corrosive effect on: brass copper aluminum carbon steel (iron) Not corrosive to: Stainless steel

#### Oxidizing properties:

Not an oxidizer.

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### 11. Toxicological information

#### Acute toxicity

##### Oral:

*Information on: Ammonium Nitrate*  
*Type of value: LD50*  
*Species: rat (male/female)*  
*Value: 2,950 mg/kg (OECD Guideline 401)*

*Information on: urea*  
*Type of value: LD50*  
*Species: rat (male)*  
*Value: 14,300 mg/kg (OECD Guideline 401)*

##### Inhalation:

*Information on: Ammonium Nitrate*  
*Type of value: LC50*  
*Species: rat*  
*Value: 88.8 mg/l*  
*Exposure time: 4 h*  
*Literature data.*

##### Dermal:

*Information on: Ammonium Nitrate*  
*Type of value: LD50*  
*Species: rat (male/female)*  
*Value: > 2,000 mg/kg (OECD Guideline 402)*

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**Irritation / corrosion**

**Skin:**

Species: rabbit  
Result: moderately irritating

*Information on: Ammonium Nitrate*  
*Species: rabbit*  
*Result: non-irritant*  
*Method: OECD Guideline 404*

*Information on: urea*  
*Species: rabbit*  
*Result: non-irritant*  
*Method: OECD Guideline 404*

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**Eye:**

*Information on: Ammonium Nitrate*  
*Species: rabbit*  
*Result: Irritant.*  
*Method: OECD Guideline 405*

*Information on: urea*  
*Species: rabbit*  
*Result: non-irritant*  
*Method: OECD Guideline 405*

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**Sensitization**

*Information on: Ammonium Nitrate*  
*Assessment of sensitization:*  
*Skin sensitizing effects were not observed in animal studies.*

*Information on: urea*  
*Assessment of sensitization:*  
*Study scientifically not justified.*

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*Information on: Ammonium Nitrate*  
*Mouse Local Lymph Node Assay (LLNA)*  
*Species: mouse*  
*Result: Non-sensitizing.*  
*Method: OECD Guideline 429*

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**Repeated dose toxicity**

*Information on: Ammonium Nitrate*  
*Assessment of repeated dose toxicity:*  
*Repeated oral uptake of the substance did not cause substance-related effects. The product has not been tested. The statement has been derived from products of a similar structure or composition.*

*Information on: urea*  
*Assessment of repeated dose toxicity:*  
*Repeated oral uptake of the substance did not cause substance-related effects. Repeated dermal uptake of the substance did not cause substance-related effects.*

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### Genetic toxicity

*Information on: Ammonium Nitrate*

*No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The substance was not mutagenic in studies with mammals. The product has not been tested. The statement has been derived from products of a similar structure or composition.*

*Information on: urea*

*The substance was not mutagenic in bacteria.*  
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## 12. Ecological Information

### Fish

*Information on: Ammonium Nitrate*

*Acute:*

*static*

*Cyprinus carpio/LC50 (48 h): 447 mg/l*

*Literature data. The statement of the toxic effect relates to the analytically determined concentration.*  
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### Aquatic invertebrates

*Information on: Ammonium Nitrate*

*Acute:*

*Daphnia magna/EC50 (48 h): 490 mg/l*

*The product has not been tested. The statement has been derived from products of a similar structure or composition.*  
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## 13. Disposal considerations

### Waste disposal of substance:

Must be disposed of or incinerated in accordance with local regulations.

### Container disposal:

Dispose of in a licensed facility.

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## 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

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### 15. Regulatory Information

#### Federal Regulations

**Registration status:**

Chemical DSL, CA released / listed

**WHMIS classification:** 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.**

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### 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.

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**MSDS Prepared by:**

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END OF DATA SHEET