

# Safety Data Sheet

## 28% UAN

Revision date : 2019/04/22

Version: 3.0

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(30458887/SDS\_GEN\_CA/EN)

### 1. Identification

#### Product identifier used on the label

#### 28% UAN

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

Recommended use\*: fertilizers

\* 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 CORPORATION  
100 Park Avenue  
Florham Park, NJ 07932, USA

##### Contact address:

BASF Canada Inc.  
100 Milverton Drive  
Mississauga, ON L5R 4H1  
CANADA  
Telephone: +1 289 360-1300

#### Emergency telephone number

CHEMTREC: 1-800-424-9300  
BASF HOTLINE: (800) 454-COPE (2673)

#### Other means of identification

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### 2. Hazards Identification

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

#### Classification of the product

No need for classification according to GHS criteria for this product.

#### Label elements

The product does not require a hazard warning label in accordance with GHS criteria.

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### 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>
6484-52-2	35.0 - 55.0%	Ammonium Nitrate
57-13-6	25.0 - 40.0%	urea
7732-18-5	15.0 - 32.0%	Water

### 4. First-Aid Measures

#### Description of first aid measures

##### General advice:

Change contaminated clothing and shoes. If you feel unwell, seek medical advice (show the label where possible)

##### If inhaled:

Keep patient calm, remove to fresh air. If symptoms persist, seek medical advice.

##### If on skin:

Wash thoroughly with soap and water. If irritation develops, seek medical attention.

##### If in eyes:

Remove contact lenses, if present. Flush with copious amounts of water for at least 15 minutes. If irritation develops, seek medical attention.

##### If swallowed:

Rinse mouth immediately with water. If symptoms persist, seek medical advice.

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

Symptoms: (Further) symptoms and / or effects are not known so far

Hazards: No hazard is expected under intended use and appropriate handling.

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

##### Note to physician

Treatment: Symptomatic treatment (decontamination, vital functions).

### 5. Fire-Fighting Measures

#### Extinguishing media

Additional information:

Use extinguishing measures to suit surroundings.

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

Hazards during fire-fighting:

ammonia, Imidodicarbonic diamide, carbon oxides, nitrogen oxides

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

#### **Further information:**

Dust can form an explosive mixture with air.

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## **6. Accidental release measures**

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

#### **Environmental precautions**

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

For small amounts: Pick up with suitable appliance and dispose of. Rinse away residue with plenty of water

For large amounts: For spills, stop leaks and provide diking to contain the material. Pick up with inert absorbent material (e.g. sand, earth etc.). Dispose of absorbed material in accordance with regulations.

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## **7. Handling and Storage**

### **Precautions for safe handling**

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.

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

Further information on storage conditions: 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

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## **8. Exposure Controls/Personal Protection**

No occupational exposure limits known.

### **Personal protective equipment**

#### **Respiratory protection:**

Respiratory protection may not be required under normal operating conditions if adequate ventilation is provided. Wear a NIOSH-certified (or equivalent) amine/organic vapor respirator.

#### **Hand protection:**

Chemical resistant protective gloves

#### **Eye protection:**

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

#### **Body protection:**

Impermeable protective clothing

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### 9. Physical and Chemical Properties

Form:	liquid	
Odour:	ammonia-like, slight odour	
Odour threshold:	not determined	
Colour:	colourless	
pH value:	6.8 - 8.5	
Melting point:	not applicable	
onset of boiling:	107.2 °C	
Flash point:	Non-flammable.	
Flammability:	not highly flammable	(derived from flash point)
Lower explosion limit:	For liquids not relevant for classification and labelling.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Autoignition:	not determined	
Vapour pressure:	not determined	
<i>Information on: Ammonium Nitrate</i>		
Vapour pressure:	The substance / product decomposes therefore not determined., Study scientifically not justified.	
<i>Information on: urea</i>		
Vapour pressure:	0.000016 hPa ( 25 °C)	(measured)
<i>Information on: Water</i>		
Vapour pressure:	23.4 hPa ( 20 °C) Literature data.	
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Density:	approx. 1.05 - 1.35 g/cm3 ( 30 °C)	
Relative density:	1.05 - 1.35 ( 30 °C)	
Vapour density:	not determined	
Partitioning coefficient n-octanol/water (log Pow):	not applicable for mixtures	
<i>Information on: urea</i>		
Partitioning coefficient n-octanol/water (log Pow):	-1.73 ( 20 °C)	(Directive 92/69/EEC, A.8)
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Self-ignition temperature:	not applicable	
Thermal decomposition:	not determined	
Viscosity, dynamic:	not determined	
Viscosity, kinematic:	not determined	
Solubility in water:	fully soluble	
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.	

### 10. Stability and Reactivity

#### Reactivity

Corrosion to metals:

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

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Oxidizing properties:  
not fire-propagating

### Chemical stability

#### Possibility of hazardous reactions

The product is stable if stored and handled as prescribed/indicated.  
Violent reaction under influence of oxidizing agents. Can nitrate, oxidize and explode. Reacts with inorganic acid chlorides. No hazardous reactions when stored and handled according to instructions.

#### 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.

#### Incompatible materials

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

#### Hazardous decomposition products

Decomposition products:  
Possible thermal decomposition products: Imidodicarbonic diamide, ammonia, carbon oxides, nitrous gases

Thermal decomposition:  
not determined

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## 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: Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact. The product has not been tested. The statement has been derived from the properties of the individual components.

#### 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)*

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Inhalation

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*Information on: Ammonium Nitrate*

*Type of value: LC50*

*Species: rat*

*Value: 88.8 mg/l*

*Exposure time: 4 h*

*Literature data.*

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### Dermal

*Information on: Ammonium Nitrate*

*Type of value: LD50*

*Species: rat (male/female)*

*Value: > 5,000 mg/kg (OECD Guideline 402)*

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### Assessment other acute effects

Assessment of STOT single:

The available information is not sufficient for the evaluation of specific target organ toxicity.

### Irritation / corrosion

Assessment of irritating effects: May cause slight irritation to the skin. May cause slight irritation to the eyes. May cause slight irritation to the respiratory tract. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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### Skin

*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

Assessment of sensitization: A sensitizing effect on particularly sensitive individuals cannot be excluded. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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*Information on: Ammonium Nitrate*

*Assessment of sensitization:*

*Skin sensitizing effects were not observed in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.*

*Information on: urea*

*Assessment of sensitization:*

*Study scientifically not justified.*

*Information on: Ammonium Nitrate*

*Mouse Local Lymph Node Assay (LLNA)*

*Species: mouse*

*Result: Non-sensitizing.*

*Method: OECD Guideline 429*

*The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.*

### Aspiration Hazard

No aspiration hazard expected.

## Chronic Toxicity/Effects

### Repeated dose toxicity

Assessment of repeated dose toxicity: Not classified, due to lack of data.

*Information on: Ammonium Nitrate*

*Assessment of repeated dose toxicity: Repeated oral exposure to large quantities may affect certain organs. The product has not been tested. The statement has been derived from substances/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.*

### Genetic toxicity

*Information on: Ammonium Nitrate*

*Assessment of mutagenicity: 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 substances/products of a similar structure or composition.*

*Information on: urea*

*Assessment of mutagenicity: The substance was not mutagenic in bacteria.*

### Carcinogenicity

Assessment of carcinogenicity: Not classified, due to lack of data.

### Reproductive toxicity

Assessment of reproduction toxicity: Not classified, due to lack of data.

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### Teratogenicity

Assessment of teratogenicity: Not classified, due to lack of data.

### **Symptoms of Exposure**

(Further) symptoms and / or effects are not known so far

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## 12. Ecological Information

### **Toxicity**

#### Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

The product has not been tested.

#### Toxicity to fish

*Information on: Ammonium Nitrate*

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

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

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#### Aquatic invertebrates

*Information on: Ammonium Nitrate*

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

*The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.*

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### **Persistence and degradability**

#### Assessment biodegradation and elimination (H2O)

Biodegradable.

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## 13. Disposal considerations

### **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

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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

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## 16. Other Information

#### **SDS Prepared by:**

BASF NA Product Regulations

SDS Prepared on: 2019/04/22

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