

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

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.

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.

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

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.	

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)

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

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)

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.

Dermal

Information on: Ammonium Nitrate

Type of value: LD50

Species: rat (male/female)

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

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.

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

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

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

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.

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.

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Biodegradable.

13. Disposal considerations

Container disposal:

Dispose of in a licensed facility.

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

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: 2019/04/22

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