

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Trade name : UAN-32
 Synonyms : UAN-30 / UAN-28

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Fertilizer

1.3. Supplier

Acron USA Inc.
 20803 Biscayne Blvd
 Suite 505
 Aventura, FL 33180
 Tel:+1 (954) 455 5600

Email: acron.usa@acron.com

1.4. Emergency telephone number

Emergency number : Call CHEMTREC – Day or Night
 1 703-741-5970 / 1 800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Serious eye damage/eye irritation Category 2A Causes serious eye irritation

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Warning

Hazard statements (GHS US) :

Causes serious eye irritation

Precautionary statements (GHS US) :

Wash hands thoroughly after handling.
 Wear eye protection.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification

: Health hazard if ingested in large quantities. Overexposure to this material may result in methemoglobinemia.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Ammonium nitrate	(CAS-No.) 6484-52-2	38 – 47	Ox. Sol. 3, H272 Eye Irrit. 2A, H319
Urea	(CAS-No.) 57-13-6	29 – 36	Not classified

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Name	Product identifier	%	GHS US classification
Water	(CAS-No.) 7732-18-5	18.5 – 31.5	Not classified

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin thoroughly with mild soap and water. Seek medical attention if ill effect or irritation develops.
- First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after inhalation : May cause minor irritation to the respiratory tract and to other mucous membranes.
- Symptoms/effects after skin contact : May cause slight temporary irritation.
- Symptoms/effects after eye contact : Causes serious eye irritation.
- Symptoms/effects after ingestion : May cause gastric irritation. Overexposure to this material may result in methemoglobinemia. May cause cyanosis.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically. Methylene blue is an effective antidote for symptomatic methemoglobinemia.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

- Fire hazard : Could decompose explosively when heated or involved in a fire. On combustion forms: Nitrogen oxides. Ammonia. Toxic gases.
- Explosion hazard : Explosion risk in case of fire. Do not allow product to dry out.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Evacuate unnecessary personnel.

6.1.1. For non-emergency personnel

- Protective equipment : Wear suitable protective clothing. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Ventilate spillage area. Stop leak if safe to do so. Do not allow product to dry out.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Collect spillage. Do not use sawdust or other combustible material to absorb spilled material. Take up large spills with pump or vacuum.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Store away from other materials. Collect all waste in suitable and labeled containers and dispose according to local legislation.
- Other information : Dispose of at a licensed waste collection center.

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6.4. Reference to other sections

For disposal of residues refer to section 13 : "Disposal considerations". For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Do not allow product to dry out. Keep away from heat and direct sunlight. Ensure that there is a suitable ventilation system. Explosive compounds are formed on contact with : Nitric acid, Metallic powders, Reducing agents.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Always wash hands after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a dry, cool and well-ventilated place. Keep container tightly closed.
- Incompatible materials : Metals. Metallic powders. Acids. Alkali. Strong oxidizing agents. Strong reducing agents. Nitric acid. Copper alloys. Chlorates. Brass.

SECTION 8: Exposure controls/personal protection

8.1. 1. Control parameters

UAN-32	
No additional information available	
Ammonium nitrate (6484-52-2)	
No additional information available	
Urea (57-13-6)	
USA - AIHA - Occupational Exposure Limits	
WEEL TWA (mg/m ³)	10 mg/m ³
Water (7732-18-5)	
No additional information available	

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Environmental exposure controls : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Impermeable protective gloves

Eye protection:

Chemical goggles or safety glasses

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Colorless.
- Color : Colorless to Slightly coloured
- Odor : Faint odour of ammonia
- Odor threshold : No data available

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pH	: 6.5 – 7.1
Melting point	: No data available
Freezing point	: 2 °C (35.6 °F)
Boiling point	: 107 °C (224 °F)
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 1255 – 1326 kg/m ³ (40 °C; 104 °F)
Solubility	: Miscible with water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use. Explosive compounds are formed on contact with : Nitric acid. Reducing agents. Metallic powders.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Decomposes on heating. Heating may cause an explosion. Refer to the detailed list of incompatible materials in section 10 Stability/Reactivity.

10.4. Conditions to avoid

Do not allow product to dry out. Do not mix with other chemicals. Keep out of direct sunlight. Keep away from heat.

10.5. Incompatible materials

Metals. Metallic powders. Acids. Alkali. Strong oxidizing agents. Strong reducing agents. Nitric acid. Chlorates. Brass.

10.6. Hazardous decomposition products

At high temperature may liberate toxic gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

Ammonium nitrate (6484-52-2)	
LD50 oral rat	2217 – 2950 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 88800 mg/m ³
Urea (57-13-6)	
LD50 oral rat	5000 – 15000 mg/kg
LC50 inhalation rat (mg/l)	Urea dust at 22 mg/m ³ caused mild irritation (species not specified)
Water (7732-18-5)	
LD50 oral rat	> 90 ml/kg

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Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 6.5 – 7.1
Serious eye damage/irritation	: Causes serious eye irritation. pH: 6.5 – 7.1
Respiratory or skin sensitization	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
Viscosity, kinematic	: No data available
Symptoms/effects after inhalation	: May cause minor irritation to the respiratory tract and to other mucous membranes.
Symptoms/effects after skin contact	: May cause slight temporary irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May cause gastric irritation. Overexposure to this material may result in methemoglobinemia. May cause cyanosis.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : This material has not been tested for environmental effects.

Ammonium nitrate (6484-52-2)	
LC50 fish 1	95 – 102 mg/l (Exposure time: 48 h - mg total NH3/L)
EC50 Daphnia 1	124.9 mg/l (mg total NH3/L)
LC50 fish 2	74000 µg/l (Exposure time: 48 h - Species: Carp)

Urea (57-13-6)	
LC50 fish 1	16200 – 18300 mg/l (Exposure time: 96 h - Species: Poecilia reticulata)
EC50 Daphnia 1	3910 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Urea (57-13-6)	
BCF fish 1	< 10
Partition coefficient n-octanol/water (Log Pow)	-1.59 (at 25 °C)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Notify authorities if product enters sewers or public waters.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Notify authorities if product enters sewers or public waters.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

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Transportation of Dangerous Goods

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

Ammonium nitrate (6484-52-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Urea (57-13-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Ammonium nitrate (6484-52-2)

Listed on the Canadian DSL (Domestic Substances List)

Urea (57-13-6)

Listed on the Canadian DSL (Domestic Substances List)

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Urea (57-13-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Water (7732-18-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

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This material is considered hazardous according to the criteria of the US OSHA Hazard Communication Standard (29 CFR 1910.1200).

Urea (57-13-6)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Water (7732-18-5)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

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15.3. US State regulations

No additional information available

SECTION 16: Other information

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Revision date : 26 March 2020
Other information : None.

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.