

## 1. Chemical product and company identification

### 1.1. Product identifier

Product form : Mixture  
Trade name : Ammonium Sulfate Nitrate

### 1.2. Recommended uses and restrictions

Use Categories : 11 - Fertilizers  
1.2.1. Recommended use : Fertilizers.

### 1.3. Supplier information

- Supplier  
Company : Capro  
Address : 108-12, Sapyeong-ro, Nam-gu, Ulsan, Korea  
Emergency telephone number : +82-052-270-9783

## 2. Hazards identification

### 2.1. Classification of the substance or mixture

Acute toxicity (dermal), Category 5	H313
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319

### 2.2. Label elements

#### 2.2.1. Hazard pictograms (GHS KR)



#### 2.2.2. Signal word (GHS KR)

Warning.

#### 2.2.3. Hazard statements (GHS KR)

H313 - May be harmful in contact with skin.  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.

#### 2.2.4. Precautionary statements (GHS KR)

##### Precaution:

P264 - Wash ... thoroughly after handling.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

##### Treatment:

P302+P352 - IF ON SKIN: Wash with plenty of water/....  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 - Call a POISON CENTER/doctor/... if you feel unwell.  
P321 - Specific treatment (see ... on this label).  
P332+P313 - If skin irritation occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.

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according to MOEL Public notice 2020-130

### Storage:

### Disposal:

### 2.3. Hazards - Other hazards which do not result in classification - Hazard Risk

No data available

## 3. Composition/information on ingredients

Product form : Mixture

Substance name	Other Names	Product identifier number	Concentration (%)
Ammonium Nitrate	-	CAS-No.: 6484-52-2 KECI-No.: KE-01715	44
Ammonium Sulfate	-	CAS-No.: 7783-20-2 KECI-No.: KE-01743	55.5
Water	AQUA / water	CAS-No.: 7732-18-5 KECI-No.: KE-35400	0.5

## 4. First-aid measures

### 4.1. First-aid measures after eye contact

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.

### 4.2. First-aid measures after skin contact

Wash skin with plenty of water.  
Take off contaminated clothing.  
If skin irritation occurs: Get medical advice/attention.

### 4.3. First-aid measures after inhalation

Remove person to fresh air and keep comfortable for breathing.

### 4.4. First-aid measures after ingestion

Call a poison center or a doctor if you feel unwell.

### 4.5. Other medical advice or treatment

Treat symptomatically.

## 5. Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.  
Unsuitable extinguishing media : Not applicable

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

Not applicable

### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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### 6. Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Ventilate spillage area.  
Avoid contact with skin, eyes and clothing.  
Do not attempt to take action without suitable protective equipment.  
For further information refer to section 8: "Exposure controls/personal protection".  
Dispose of materials or solid residues at an authorized site.

#### 6.2. Environmental precautions and protective procedures

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Mechanically recover the product.

### 7. Handling and storage

#### 7.1. Precautions for safe handling

Ensure good ventilation of the work station.  
Do not get in eyes, on skin, or on clothing.  
Wear personal protective equipment.  
Wash contaminated clothing before reuse.  
Do not eat, drink or smoke when using this product.  
Always wash hands after handling the product.

#### 7.2. Conditions for safe storage

Store in a well-ventilated place.  
Keep cool.

### 8. Exposure controls/personal protection

#### 8.1. Occupational Exposure Limits

No data available

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

#### 8.3. Personal protection

##### Hand protection:

Protective gloves

##### Eye protection:

Safety glasses

##### Skin and body protection:

Wear suitable protective clothing

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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### Personal protective equipment symbol(s):



## 9. Physical and chemical properties

a) Appearance	: No data available
Physical state	: Solid.
b) Odour	: No data available
c) Odour threshold	: No data available
d) pH	: 4.3 – 5.3 (KS I ISO 10390:2020)
e) Melting / freezing point	: No data available
f) Initial boiling point and boiling range	: No data available
g) Flash point	: No ignition below 93°C (KS I ISO 3679:2015)
h) Evaporation rate	: No data available
i) Flammability (solid, gas)	: Non flammable.
j) Upper / lower flammability or explosive limits	: Not applicable
k) Vapour pressure	: No data available
l) Solubility	: soluble.
m) Vapour density	: No data available
n) Relative density	: 0.82 (20°C KS M 0602:2020)
o) Partition coefficient n-octanol/water	: No data available
p) Auto-ignition temperature	: No auto-ignition at 20°C UN TDG Test N.2
q) Decomposition temperature	: No data available
r) Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
s) Molecular mass	: No data available

## 10. Stability and reactivity

### 10.1. Chemical stability and Possibility of hazardous reactions

The product is non-reactive under normal conditions of use, storage and transport.  
Stable under normal conditions.  
No dangerous reactions known under normal conditions of use.

### 10.2. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.3. Incompatible materials

No data available

### 10.4. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. Toxicological information

### 11.1. Information on exposure routes

Oral	: Not classified
Skin and eyes contact	: May be harmful in contact with skin. Causes skin irritation. Causes serious eye irritation.
Inhalation	: Not classified

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### 11.2. Health hazards

**Acute toxicity (oral):**

Not classified

**Acute toxicity (dermal):**

May be harmful in contact with skin.

**Acute toxicity (inhalation):**

Not classified

#### Ammonium Nitrate (6484-52-2)

LD50 oral rat	2950 mg/kg
LD50 dermal rat	> 5000 mg/kg

#### Ammonium Sulfate (7783-20-2)

LD50 dermal rat	2000 mg/kg
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#### Water (7732-18-5)

LD50 oral rat	> 90 ml/kg
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**Skin corrosion/irritation:**

Causes skin irritation.

**Serious eye damage/irritation:**

Causes serious eye irritation.

**Respiratory sensitization:**

Not classified

**Skin sensitization:**

Not classified

**Carcinogenicity:**

Not classified

**Mutagenicity:**

Not classified

**Reproductive toxicity:**

Not classified

**STOT-single exposure:**

Not classified

**STOT-repeated exposure:**

Not classified

#### Ammonium Sulfate (7783-20-2)

NOAEL (oral, rat, 90 days)	256 mg/kg bodyweight/day
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**Aspiration hazard:**

Not classified

#### Ammonium Sulfate Nitrate

Viscosity, kinematic	Not applicable
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#### Ammonium Nitrate (6484-52-2)

Viscosity, kinematic (calculated value) (40 °C)	Not applicable
Viscosity, kinematic	Not applicable

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Ammonium Sulfate (7783-20-2)	
Viscosity, kinematic (calculated value) (40 °C)	Not applicable
Viscosity, kinematic	Not applicable

Water (7732-18-5)	
Density	0.99821 g/cm <sup>3</sup> (at 20 °C)

## 12. Ecological information

### 12.1. Ecotoxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

Ammonium Nitrate (6484-52-2)	
LC50 - Fish [1]	6000 mg/l
EC50 - Crustacea [1]	490 mg/l

Ammonium Sulfate (7783-20-2)	
LC50 - Fish [1]	53 mg/l
EC50 - Crustacea [1]	121.7 mg/l
Partition coefficient n-octanol/water (Log Kow)	< 0.48
Partition coefficient n-octanol/water (Log Pow)	0.48 Source: ECHA

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Kow)	-1.38

### 12.2. Persistence and degradability

No data available

### 12.3. Bioaccumulative potential

Ammonium Sulfate (7783-20-2)	
Partition coefficient n-octanol/water (Log Pow)	0.48 Source: ECHA
Partition coefficient n-octanol/water (Log Kow)	< 0.48

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Kow)	-1.38

### 12.4. Mobility in soil

No data available

### 12.5. Other adverse effects

Ozone	: Not classified
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Other adverse effects : No additional information available

### 13. Disposal considerations

#### 13.1. Disposal method

Dispose of contents/container in accordance with licensed collector's sorting instructions.

#### 13.2. Disposal precaution

No data available

### 14. Transport information

UN RTDG	ADR	IMDG	IATA
<b>14.1. UN number</b>			
Not regulated for transport			
<b>14.2. UN proper shipping name</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>			
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Marine pollutant</b>			
Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available			

#### 14.6. Special precautions for user

No data available

### 15. Regulatory information

#### 15.1. Occupational Safety and Health Act

Hazardous Substances Prohibited for Manufacturing	Not applicable
Hazardous Substances Requiring Permission	Not applicable
Threshold Limit Values Chemicals	Not applicable
Hazardous Substances Below Permissible Level	Not applicable
Hazardous Substances Subject to Working Environment Measurement	Not applicable
Hazardous Substances Subject to Workers Requiring Health Examination	Not applicable
Hazardous Substances Subject to Control	Not applicable

#### 15.2. Chemicals Control Act

Toxic Chemicals	Not applicable
Prohibited Chemicals	Not applicable
Restricted Chemicals	Not applicable
Substance requiring preparation for accidents	SRPA-No. : 59. Ammonium nitrate (contains above 33%)

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### 15.3. ACT ON REGISTRATION, EVALUATION, ETC. OF CHEMICALS (K-REACH)

Korea Existing Chemicals Inventory (KECI)	KECI-No. : KE-01715. Ammonium nitrate KECI-No. : KE-01743. Ammonium sulfate KECI-No. : KE-35400. Water
Priority Existing Chemical ('PEC') – subject to registration	Ammonium nitrate
Priority Control Substances (Korea)	Not applicable
CMR Substances (Korea)	Not applicable

### 15.4. Safety Control of Dangerous Substances Act

Safety Control of Dangerous Substances Act	Not applicable
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### 15.5. Wastes Control Act

Wastes Control Act	Not applicable
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### 15.6. Other Domestic and International Regulatory Information

#### Domestic

Persistent Organic Pollutants(POPs) Control Act	Not applicable
Ozone Depleting Substances(ODS)	Not applicable

#### International

#### EU Regulatory Information

EU Candidate list (SVHC)	Contains no substance on the REACH candidate list
EU authorization list (REACH Annex XIV)	Contains no REACH Annex XIV substances
EU restriction list (REACH Annex XVII)	Not applicable

#### US Regulatory Information

CERCLA Section 103 (40CFR302.4)	Not applicable
EPCRA Section 302 (40CFR355.30)	Not applicable
EPCRA Section 304 (40CFR355.40)	Not applicable
EPCRA Section 313 (40CFR372.65)	Not applicable

#### International agreements

No data available

## 16. Other information

<b>16.1. Data sources:</b>	KOSHA, ECHA.
<b>16.2. Issue date:</b>	08/01/1999
<b>16.3. Revision number and date:</b>	7.0, 31/05/2023
<b>16.4. Other information:</b>	No data available
<b>16.5. Indication of changes:</b>	No data available

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.