



**Profert (Pty) Ltd**  
Material Safety Data Sheet (MSDS)

1. Product and Company identification

Identification of the substance or preparation

Product name	- <b>Ammonium Nitrate solution</b> (Liquid fertilizer as 19% or 21%)	Serial Number : P012
Material uses	- Fertilizer	Date issued : Jan 2012
Synonyms	- AN 19-L, AN 21-L	Pages : 4
Supplier address	- Profert (Pty) Ltd 43 Ross Street Potchefstroom 2531 Tel nr : +27 18 293 3530	

2. Composition / Information on ingredients

Composition	- Ammonium Nitrate 19% N or 21% N
Molecular formula	- $\text{NH}_4\text{NO}_3$
Appearance	- Light blue to colourless liquid, little or no odour.

3. Hazards identification

Effects and symptoms	- May cause irritation to skin and eyes. If swallowed may cause gastrointestinal disorders and large doses may cause vomiting and collapse.
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4. First Aid measures

Specific immediate treatment	
Inhalation	- Remove patient from exposure, keep warm and at rest. Obtain medical attention.
Ingestion	- Do NOT induce vomiting. If not unconscious wash out mouth with water and give plenty of water to drink. Get medical attention if symptoms appear.
Skin contact	- In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms appear.
Eye contact	- In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Check for and remove any contact lenses. Get medical attention if symptoms appear.

Nitrates may cause dilation of blood vessels and methaemoglobin formation. This result in low blood pressure and decrease blood oxygen carrying capacity.

## 5. Fire-fighting measures

### Extinguishing Media

Special fire-fighting procedures - Material may become explosive after dewatering. It is important to keep the material in solution.

Protection of fire-fighters - Fire-fighters should wear self-contained breathing apparatus (SCBA) and full protective clothing should be worn in fire conditions.

## 6. Accidental release measures

Personal Precautions - As a minimum use rubber gloves, dust mask and eye/face protection.

Environmental precautions and clean-up methods - Shovel into well labelled containers for disposal. Thereafter wash spillage area with large amounts of water to drain. Dam or dyke spillage with absorbent material or earth.

Note: See section 8 for personal protective equipment and section 13 for waste disposal.

## 7. Handling and Storage

Handling - Avoid contact with eyes or skin. Avoid prolonged contact with skin.

Storage - Keep container tightly closed. Keep container in a cool, well-ventilated area. Store and use away from strong bases.

Packaging materials - Use original container.

## 8. Exposure Controls / Personal Protection

Engineering measures - Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Hygiene measures - Wash hands after handling compounds and before eating, smoking, using lavatory and at the end of the day.

Skin and body protection - Full length chemical resistant overalls / apron, exhaust ventilation and the use of barrier cream are recommended.

Hand protection - Gloves (Impervious)

Eye protection - Use dust goggles / masks if high dust concentration is generated.



## 9. Physical and chemical properties

Appearance	- Light blue to colourless liquid, little or no odour.
Boiling Point	- 142°C
Crystallisation	- 160 - 165°C
Specific Gravity (SG)	- 1.26

## 10. Stability and Reactivity

Stability	- Stable under recommended storage and handling conditions.
Decomposition products	- Decomposes on heating to Ammonia and Nitrogen of oxides.
Hazardous reactions	- Keep away from strong oxidizers.

## 11. Toxicological information

Potential acute health effects	
Eye contact	- Hazardous in case of eye contact.
Skin contact	- May cause allergic reactions in some individuals.
Inhalation	- Vapour may cause irritation to the respiratory tract.
Ingestion	- Swallowing large amounts may cause irritation and gastrointestinal disorders and may cause nausea, diarrhoea, vomiting and collapse.
Long term exposure	- Those with history of cardiovascular disease may have aggravated reactions to overexposure.

## 12. Ecological information

Users should ensure that they comply with local, provincial and national environmental legislation.	
Environmental affects, behaviour and fate	- Toxic to aquatic life.

## 13. Disposal considerations

Method of disposal	- Waste must be disposed of in accordance with local, provincial and national environmental control regulations. Recover, reclaim or recycle if practicable.
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## 14. Transport information

Hazchem Code	- 1 S (White S on black background)
UN Number	- 2072
Shipping name	- Ammonium Nitrate Fertilizers N.O.S.

## 15. Regulatory information

Risk phrases	- Contact with combustible material may cause fire. Explosive when mixed with combustible material.
Safety phrases	- Keep away from combustible material. This material and its container must be disposed of as hazardous waste.
Users should ensure that they comply with any relevant local, provincial and national legislation.	

## 16. Other information

This MSDS summarises at the date of issue our best knowledge of the health, safety and environmental hazard information related to the product and in particular how to safely handle, use, store and transport the product. Since Profert (Pty) Ltd cannot anticipate or control the conditions under which the product may be handled, used, stored or transported, each user must, prior to usage, review this MSDS in the context of how the user intends to handle, use, store or transport the product and beyond, and communicate such information to all relevant parties.

We shall not assume any liability for the accuracy or completeness of the information contained herein or any advice given unless there has been gross negligence on our part. Profert (Pty) Ltd emphasizes safe use of all materials, promotes sustainable practices and encourages preservation of the environment.