Material Safety Data Sheet
Ammonium Nitrate Porous Prills

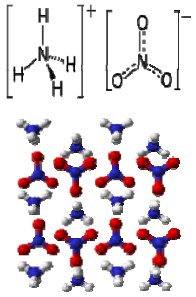
Rev No.2(11 / 2011)

Released on: Jan-2010	Reviewed By: SHE Section	Prepared By: Quality Control Section

1- Company & Product Identification

Suez International Nitrate Co. (SINCO)	P. O. Box 114 43713, Ataka, Suez, Egypt. Tel : + (2) 0623365483 + (2) 0623365484 Fax: + (2) 062 3365453 Email: sinco@sinco.com.eg
Common Names	Porous PrillsAmmonium Nitrate (PPAN) Industrial Grade Ammonium Nitrate (IGAN) Low Density Ammonium Nitrate (LDAN)
Formula	NH_4NO_3
Synonym	Low Density Ammonium Nitrate
Chemical Family	Nitrate (oxidizer)
Material Uses	Civil explosives&Industrial uses
Protective Clothes	Gloves, protective glasses & Mask

Structure



2- Hazardous identification

NFPA Classification	DOT / TDG Pictograms	WHMIS Classification	HMIS		Protective Clothing
			Health Flammability Reactivity PPE	1 0 1 E	

3-Transportation Data

CAS Number	6484-52-2
UN Number	1942
UN Pack Group	III
IMO Hazard Class	5.1

4- Compositions / Information on Ingredients

Component Name	Percentage by Weight	CAS No
Ammonium Nitrate	99.5 – 99.8 %	6484-52-2
Conditioning Agent	≈ 0.2 %	--

5-Stability &Reactivity Data

Stability	Stable under normal ambient condition of temperature & pressure
Instability Temperature &Pressure	Not available
Remarks on Reactivity	Hygroscopic material absorb moisture from the air
Corrosivity	Slightly corrosive to Zinc & Copper
	Non-corrosive tostainless steel (304 or 316)
Remarks on Corrosivity	Avoid contact with water
	Slow hydrolysis may slowly corrode metals

Avoid mixing Ammonium Nitrate with wood, organic materials, Sulfur, Chlorides, Phosphorus, Acids, Alkali, flammable & combustible liquid, finely powdered metals & Charcoals

6-Handling &Storage

Precautions	Keep away from heat, combustible material & reducing agent
	Take precautions against electrostatics discharges
Storage	Store in a dry, cool &well-ventilated area
	Keep away from incompatible materials

7-Hazard Identification

Eyes & Skin	Irritation		
Inhalation	Slight irritation		
Ingestion	May cause cyanosis, nausea, vomiting, vertigo, abdominal pain & rapid heart beat		
Potential Acute Health Effects	Symptoms of overexposure acute cyanosis, nausea, vomiting, vertigo, abdominal pain & rapid heart beat		
	Convulsion & death can occur		
Potential Chronic Health Effect	No information		
Carcinogenicity Lists	IARC Monograph	NTP	OSHA
	No	No	No

8-First Aid Measures

Eyes	Immediately flush with water at least 15 min
Skin	Wash with mild soap then water
Inhalation	Provide fresh air & get prompt medical attention
Ingestion	If swallowed & the person is conscious , give large amount of water & induce vomiting

9-Exposure Limits

Alberta TWA	10 mg/m^3 Inhalable
	3 mg/m^3Respirable for particulate
Fed OSHA PEL	15 mg/m^3 Total dust
	5 mg/m^3Respirable fraction for particulate

10-Accident Release Measure

Small Spill	Prevent contamination with incompatible materials & keep away from heat
	If uncontaminated, recover & re-use as product
Large Spill	Prevent additional discharge, if possible to do so without hazard Prevent from entering any water sources , recover & re-use as product

11- Fire Fighting Measure

This product not flammable	
Flash Point	Not applicable
Auto Ignition Temp.	Not applicable
Lower Explosive Limit	Not applicable
Upper Explosive Limit	Not applicable
Unusual Firefighting & Explosion Hazards	Flood burning Ammonium Nitrate with large quantities of straight stream of water
	If explosion is expected, evacuate surrounding area
Extinguishing Media	**Recommended** large quantities of water
	Avoid: Carbon dioxide, dry chemical, & foam
Special Firefighting Procedures &Equipment	Don't use salt water, fight fire from protected location as steam eruptions are common & splashes from molten Ammonium Nitrate are possible
	Decomposition gases are toxic, fight fires from upwind
Product of Combustion	Material not flammable but thermal decomposition may result flammable/toxic gases, these gases are **(NO, NO_2& NH_3)**
Explosion Hazard (in the presence of various substance)	Ammonium Nitrate is an oxidizer which may react readily with other materials, especially upon heating
	The material can explode when subject to sudden shock, pressure, or high temperature (**Avoid** Temp. above 210^{o}C)
	Avoid storage in poorly ventilated spaces
	Avoid storage with incompatible materials

12-Toxicological Information

Ecotoxicity	Low toxicity for humans or animals under normal condition of use Aquatic / Marine toxicity: will release Ammonium ions which is a toxic hazard to fish, **Avoid** release to watercourse
	Product will promote algae growth which may degrade water quality & test
	Limits of Nitrate in potable water should be maintained under 10 mg/m^3

13-Physical &Chemical Properties

Nitrogen Content %	34.5% (min)
Physical Appearance	Off white prills
pH 10% soln.	5.0
Moisture Content %	0.15 % (max)
Organic Coating %	0.1 % (approx.)
Combustible material expressed as TOC %	0.2 % (max)
Inert Coating	FREE
Bulk Density (Kg/m^3)	700 – 780
Total Insoluble Matter %	0.2 % (max)
AN Molecular Mass (g/mol)	80.043
Melting Point °C	169.6
Boiling Point °C	210 (approx.) decomposition
Solubility	Highly soluble in water (1.920 g/l @ 20 ^{o}C) Soluble in alcohols
Specific Gravity @ 25°C	1.72 (100 % Basis)

14- Disposal Consideration

Recycle to process, if possible.
If not, recover and place material in a suitable container for intendeduse or disposal. Ensure disposal complies with government requirements and local regulations
The most common is recover product for use as a fertilizer if possible

15- Regulatory Information

OSHA:
This product is considered a hazardous material under criteria of the FederalOSHA Hazard Communication Standard 29 CFR 1910.120

SARA TITLE III:
a. EHS (Extremely Hazardous Substances) List: Not Listed (EPA, 1992a)
b. EHS RQ (Reportable Quantity): No RQ established.
c. TPQ (Threshold Planning Quantity): None
d. As distributed by Terra Mississippi Nitrogen, Inc., this product contains nocompounds subject to reporting under Section 313 of SARA III and 40 CFR 372
however, these federal regulations do contain reporting requirements regardingwater solutions of ammonia and nitrates. Additionally, the following federalenvironmental statutes apply to this product: SARA Title III, Sections 311 & 312 40)CFR 37.)

CERCLA Hazardous Substances List: Not listed

TSCA Inventory:
Listed (RTECS, 1993)

16- Other Information

This MSDS released on Jan/2010 then modified at Jan/ 2011 (containing 11 sections only)
Then completed to 16 section at Nov 2011

The information and recommendations are taken from data contained in independent industry-recognized references including but not limited to NIOSH, OSHA, NFPA, D.O.T. ERG, the TFI Product Testing Program, MEDITEXT, HAZARD TEXT and SAX's DangerousProperties of Industrial Materials - ninth edition.

SUEZ INTERNATIONAL NITRATE CO. (SINCO) IS NOT RESPONSIBLE FOR ANY INJURY OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY THE UNSAFE USE, STORAGE, TRANSPORTATION OR HANDLING OF THIS MATERIAL