

Safety Data Sheet

Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER	
Product name:	Porous Prill Ammonium Nitrate/PPAN ANFO Grade 99%
Other Names:	Nitric acid ammonium salt; Nitram; Nitropril; CPAN; Chemically Pure Ammonium Nitrate; Security Sensitive Ammonium Nitrate; SSAN
Chemical formula:	NH ₄ NO ₃
Recommended Use:	General chemical; explosives manufacture; fertilizer.
Company Identification: Address:	UCN CHEMICAL LIMITED Korkut Reis Neighborhood, Lale Street, Number: 13/7 Sihhiye, Cankaya Ankara Turkey
Customer Centre:	
Section 2: HAZARD IDENTIFICATION	
Emergency Overview:	Strong oxidizer. Contact with combustible material will increase fire hazard. May undergo detonation if heated under confinement causing pressure buildup or if subjected to strong shocks. Solid AN when sensitized or during decomposition may become unstable and/or explosive. When AN is heated to decomposition it may produce vapors which contain nitrogen oxides (NOX). AN is an oxidizer and as such may increase the flammability and/or explosiveness of other substances. Use water to control fires involving AN, if water is compatible with burning material. AN itself is non-flammable. AN can cause irritation to eyes and skin and may be an inhalation discomfort in confined locations
Potential Acute Health Effects	AN is a mild skin, eye, and respiratory irritant, possible allergen, and methemoglobin inducer. Because it can form methemoglobin, it may have irreversible effects which can be life threatening.
Routes of entry:	Skin contact/absorption and eye contact

Safety Data Sheet

Target organs:	Blood, Central nervous system
Skin contact:	May be aggravating to skin
Eye contact:	May be aggravating to eyes.
Inhalation:	No hazard under normal conditions.
Ingestion:	No hazard in normal industrial use. Ingestion of large amount may cause systemic ammonia poisoning and nitrate poisoning.
Chronic Exposure:	By analogy with nitrobenzene, AN is in Class A+ as a reproductive hazard. It is important to remember that this hazard is due to its association and there is no direct evidence for adverse reproductive effects. Nevertheless, it would be prudent for pregnant women not to be exposed to AN.
Explanation of carcinogenicity:	At this time, no studies were found on the possible carcinogenicity of Ammonium Nitrate in humans or experimental animals. However nitrates can be reduced to nitrites in the body, and the formed nitrites can subsequently react with amines to form suspect carcinogens N-nitrosamines.
Medical conditions aggravated by exposure:	No test data available.

Section 3: Composition Information

INGREDIENT	CAS No.	CONTENT
Ammonium nitrate	6484-52-2	99%

Section 4: FIRST AID MEASURES

Inhalation:	Generally not considered an inhalation hazard. If irritation develops move patient to fresh air and monitor. If cough or difficulty in breathing develops, evaluate for respiratory tract
--------------------	---

Safety Data Sheet

	irritation. If trained to do so, administer supplemental oxygen if needed. If irritation, coughing, or difficulty in breathing persists the patient should be seen in a health care facility.
Ingestion: a	If conscious, give the patient large quantities of milk or water to drink immediately. Do not induce vomiting. Seek medical attention.
Skin:	Immediately flush exposed area with copious amounts of tepid water for at least 15 minutes followed by washing area thoroughly with soap and water. The patient should be seen in a health care facility if irritation or pain persists.
Eye:	Immediately flush eyes with copious amounts of tepid water for at least 15 minutes. If irritation, pain, swelling, excessive tearing, or light sensitivity persists, the patient should be seen in a health care facility.
Advice to Doctor:	This product contains nitrates, which may be reduced to nitrites by intestinal bacteria. Nitrites may affect the blood (methaemoglobinaemia) and blood vessels (vasodilation and a fall in blood pressure). Effects peak within 30 minutes. Clinical signs of cyanosis appear before other symptoms because of the dark pigmentation of methaemoglobin. Institute cardiac monitoring, especially in patients with coronary, artery or pulmonary disease.

Section 5: FIREFIGHTING MEASURES

Flash Point:	Not applicable
Combustion Products:	Fire will cause ammonium nitrate to decompose giving off fumes of nitrogen oxides and ammonia.
Extinguishing Media:	Water jets. Water spray (large quantities).
Protective Equipment:	Fire-fighters to wear self-contained breathing apparatus and suitable protective clothing if there is a risk of exposure to products of combustion/decomposition
HAZCHEM Code:	1Z



Safety Data Sheet

Section 6: ACCIDENTAL RELEASE MEASURES

Spills and Disposal:

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large spill: Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

Protective Clothing:

Wear protective equipment to prevent skin and eye contact.

Environmental:

Low toxicity for fish. Do not contaminate any waterway or anybody of water by direct application, cleaning of equipment, or disposal.

Section 7: HANDLING AND STORAGE

Handling:

Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

Storage:

Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from sources of heat or ignition. Ammonium Nitrate is incompatible with, and must be stored away from, tetranitromethane, dichloroisocyanuric acid, trichloroisocyanuric acid, any bromate, chlorate, chlorite, hypochlorite or chloroisocyanurate or any inorganic nitrite. If using wooden pallets, these must be hardwood and periodically washed down with large amounts of water to remove all traces of the material. Keep containers closed when not in use - check regularly for spills. This product when stored in a confined, unventilated space/hold can give off ammonia or other odour and lead to the

Safety Data Sheet

	depletion of oxygen within this space and other confined spaces. It is therefore essential that ventilation is carried out prior to entry to all ship holds.
Other Information:	
Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION	
Exposure Limits:	10 mg/m ³
Protective Equipment:	<p>Personal protective equipment (PPE) should be used where other control measures are not practicable or adequate to control exposure. It should be chosen to prevent routine exposure and to protect workers in the case of accidental contact with ammonium nitrate.</p> <p><u>Eye/face protection:</u> Wear chemical safety glasses to prevent eye contact.</p> <p><u>Skin protection:</u> Wear PVC gloves when handling the product to prevent contact. Wear long trouser and long sleeves to prevent contact.</p> <p><u>Respiratory protection:</u> Use P2 type canister respirator where dust is a problem.</p>
Engineering Controls:	Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Avoid generating and breathing in dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.
Hygiene Precautions:	Change and wash clothing and PPE, if contaminated, or before storing and/or re-using. Wash hands and face thoroughly after handling and before work breaks, eating, drinking, smoking and using toilet facilities.
Section 9. PHYSICAL AND CHEMICAL PROPERTIES	
Appearance:	White prills, with strong disagreeable acid taste.

Safety Data Sheet

Odour:	Odourless
Specific Gravity:	1.270
Bulk Density:	755 ± 25 kg/m ³
pH:	pH of 10% solution: > 4-5
Solubility in Water:	Complete
Flash Point:	Not applicable
Melting Point:	170°C
Other Information:	
Section 10: STABILITY AND REACTIVITY	
Stability:	Stable
Hazardous Decomposition Products:	Under extreme fire conditions, may liberate hazardous gases of oxides of nitrogen and ammonia
Conditions to Avoid:	High temperatures and fire conditions
Materials to Avoid:	Organic and easily oxidizable matter
Section 11: TOXICOLOGICAL INFORMATION	
ERMA Classification:	5.1.1C, 6.1E (oral), 6.4A
Ingestion:	Swallowing can result in nausea, vomiting, diarrhoea, and abdominal pain. Swallowing large amounts may result in headaches, dizziness and a reduction in blood pressure (hypotension).
Inhalation:	Breathing in dust may result in respiratory irritation. Blasting may



Safety Data Sheet

	produce a toxic brown gas of nitrogen dioxide. Inhalation of the gas may result in chest discomfort, shortness of breath and possible pulmonary oedema, the onset of which may be delayed.
Skin:	Repeated or prolonged skin contact may lead to irritation. Contact with molten material may cause skin burns. See effects as noted under 'Inhalation'. Can be absorbed through the skin with resultant adverse effects.
Eye:	May be an eye irritant. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.
Chronic Effects:	No information available for the product.
Other Information:	

Section 12: ECOLOGICAL INFORMATION

ERMA Classification:	9.1D (fish and algal)
Ecotoxicity:	Avoid contaminating waterways

Section 13: DISPOSAL INFORMATION

Product Disposal::	Refer to local government authority for disposal recommendations. Dispose of material through a licensed waste contractor.
Container Disposal:	Empty containers must be decontaminated by rinsing thoroughly with water. Rinsing water needs to be disposed of carefully.

Section 14: TRANSPORT INFORMATION

UN Number:	1942
Proper Shipping Name:	AMMONIUM NITRATE

Safety Data Sheet

DG Class:	5.1
UN Packing Group:	III
Other Information:	

Section 15: REGULATORY INFORMATION

Labelling

Regulatory base 67/548/EEC

Additional advice This product is not classified as hazardous in terms of the EU. Directive 67/548/EEC on the classification, packaging, and labelling of dangerous substances, Annex I, as amended thru the 31st ATP [repealed by CLP Regulation].

Section 16: OTHER INFORMATION