

SAFETY DATA SHEET

1. PRODUCT AND MANUFACTURER IDENTIFICATION

MANUFACTURER: **EXPLOTEC, S.A.**
ADDRESS: **2 km west of the Volio EBAIS, San Ramón, Alajuela**
PHONE: **2456-0000**
FAX: **2456-1010**
PRODUCT: **ANFO EXPLOMAX**

HAZARD CLASSIFICATION: **CLASS 1.5 D**

2. COMPOSITION, INFORMATION OF INGREDIENTS

CHEMICAL NAME	% m/m	TLV	CAS Number
AMMONIUM NITRATE	> 90	1 mg/M3	6484-52-2
DIESEL	< 10	18 ppm	68334-30-5

3. HEALTH HAZARD DATA

Routes of entry = Skin and eye contact, ingestion, inhalation.

Inhalation: The material can be irritating to the mucous membranes of the respiratory tract. Inhalation of vapors can cause headaches, dizziness, drowsiness, and possible nausea. The product may produce a toxic brown gas of nitrogen dioxide. Inhalation of the gas can cause chest discomfort, shortness of breath, and possible pulmonary edema, the onset of which may be delayed. Absorption of ammonium nitrate by inhalation, ingestion, or through burned or broken skin can cause dilation of blood vessels by direct relaxation of smooth muscle and can cause methemoglobinemia.

Skin contact: May cause irritation. Due to the presence of diesel, a degreasing action of the skin can be generated. Repeated or prolonged contact can cause dermatitis. It can be absorbed through cut, broken, or burned skin with resulting adverse effects. See effects noted in "Inhalation".

Eye contact: Vapors may cause irritation. Direct contact with the eyes can cause irreversible damage to the cornea.

Ingestion: Ingestion of this product can cause burns to the mouth, throat, esophagus and stomach. Symptoms include difficulty swallowing, intense thirst, nausea, vomiting, and diarrhea. In very severe cases, it can lead to collapse and death. Ingestion is not a typical route of industrial exposure.

4. EMERGENCY AND FIRST AID PROCEDURES

Inhalation: Remove the source of contamination and take the affected person into fresh air. If breathing is faulty, oxygen may be beneficial if administered by trained personnel preferably with medical advice. Do not allow the victim to move unnecessarily. Call 911.

Skin contact: Avoid direct contact with the skin. Wear waterproof protective clothing if necessary. Wash the affected area with water for 20 - 30 minutes. Remove contaminated clothing and shoes. If irritation persists, see a doctor.

Eye contact: Immediately wash with water for 20 minutes, keeping the eyelids open. Use a neutral saline solution if available. Do not interrupt the flow of water. If the irritation persists, see an ophthalmologist.

Ingestion: DO NOT induce vomiting. Never give anything by mouth if the victim is losing consciousness, is unconscious, or is convulsing. Have the affected person wash his or her mouth thoroughly with water. Have the affected person take 240-300 ml of water to dilute the material in the stomach. Give immediate medical attention.

5. FIRE / EXPLOSION MEASURES

Flash point: Explosive product. Not applicable.

Lower flammable limit: Undetermined

Upper flammable limit: Undetermined

Self-ignition temperature: Undetermined

Explosion data – Mechanical impact sensitivity: This product is explosive. It should not be exposed to more than 50°C.

Fire hazard: Avoid exposing the product to sources of ignition such as heat, flames or electrical sparks.

Extinction method: If the product is involved in a fire, evacuate the area immediately. DO NOT fight fire. Avoid breathing vapors.

Protective equipment: Inorganic gas mask, safety glasses, nitrile gloves, protective clothing.

6. MEASURES IN CASE OF SPILL OR LEAK

Do not walk on spilled material, as it is slippery. Restrict access area until cleanup is complete. Make sure cleaning is done by trained personnel. Wear suitable protective equipment. Remove or isolate flammable or incompatible materials. Notify health or fire authorities. Contain spill to prevent it from entering sewers, drains, or water sources. Sweep up and dispose of all spilled material immediately. Do not allow smoking or open flames near spill site.

7. HANDLING AND STORAGE PRECAUTIONS

Handling: Ensure good ventilation. In its original container, tightly closed at room temperature (25°C). Wear safety glasses. Away from sources of ignition and heat. NO SMOKING. Avoid mechanical stress and use anti-sparking tools.

Storage: In a cool, dry and well-ventilated place. Properly labeled as an explosive material. Away from incompatible materials.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Breathing protection: NIOSH approved mask against organic vapors.

Ventilation: Maintain adequate ventilation.

Protective gloves: Nitrile or neoprene gloves.

Eye protection: The use of splash proof goggles is recommended.

Hygienic or labor practices: Drinks and food should be avoided in work areas. Wash hands and face with soap and water before eating, drinking, smoking and/or leaving the workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Granular solid, pink color, with a solvent odor.
Melting point:	165 – 170 ° C.
Boiling point:	Not applicable
Relative density:	0.8 – 0.9 grams/cm ³
Vapor density:	Undetermined
Vapor pressure:	Undetermined
pH:	Not applicable
Solubility:	Ammonium Nitrate is soluble in water. Diesel is insoluble.
Others:	Alcohol, acetone.

10. REACTIVITY DATA

Stability: Stable under normal conditions.

Incompatibility: (Materials to avoid): Reacts with alkaline agents, acids and strong oxidants. Such as tetranitromethane, dichloroisocyanuric acid, trichloroisocyanuric acid, any bromate, chlorate, chlorite, hypochlorite, perchlorate, chloroisocyanurate, any inorganic nitrite, and metal powder.

Decomposition products: When decomposed by combustion, it produces carbon oxides, nitrogen oxides and white ammonium nitrate fumes. Toxic fumes and vapors derived from hydrocarbon.

Conditions to avoid: Avoid exposing to temperatures higher than room temperature or to direct sources of heat such as flames, sparks, etc.

Hazardous Polymerization: Does not occur.

11. TOXICOLOGICAL INFORMATION

Toxic product.

LD50 (oral, rats) = N.D.

LC50 (Inhalación rats) = N.D.

Chronic exposure:

Prolonged or repeated exposure can cause cyanosis, nausea, collapse, vomiting, abdominal pain, tachycardia, rapid breathing, coma, seizures, and death can occur.

Carcinogenicity: There is no specific data, no evidence.

Mutagenicity: There is no specific data, no evidence.

Teratogenicity: There is no specific data, no evidence.

Neurotoxicity: There is no specific data, no evidence.

Reproductive toxicity: No information is available.

12. ECOLOGICAL INFORMATION

A comprehensive study of the product has not been conducted, however, pouring into any water source is not recommended. Ammonium nitrate is soluble in water and can move into groundwater and reduce its quality.

13. DISPOSAL CONSIDERATIONS

Waste and/or containers CANNOT be incinerated. Never bury or throw in water sources. The containers must not be used for other purposes. Small amounts of damaged or deteriorated material can be incorporated into the good product. Large quantities must be collected and labeled for later disposal.

14. TRANSPORT INFORMATION

The vehicle should have good ventilation and fresh air at room temperature. Do not expose to more than 50°C. Avoid anything that can perforate the container.

DOT Proper name for land transport:	Explosive, Ammonium Nitrate-Diesel Mixture
DOT Primary class:	1.5D
DOT UN:	0331
DOT Packing group:	II.

15. REGULATORY INFORMATION

Classify as Class 1: **EXPLOSIVE**, Subclass 1.5: **INSENSITIVE WITH MASS EXPLOSION HAZARD**, according to the Registration of Hazardous Products Regulation, Scope N° 74 to La Gaceta N°194.

The 2012 North American Emergency Response Guide was used.

16. OTHER INFORMATION

We believe that the information given is true. It is offered in good faith, but without guarantee, since the conditions are beyond our control. The user assumes all responsibility and risk.