



Material Safety Data Sheet (MSDS-TNT)

PRODUCT IDENTIFICATION	
Product Name	TNT
Trade Names and Synonyms	2,4,6 Trinitrotoluene
Manufacturer/Distributor	Various
Transportation Emergency	800-255-3924 (24 hrs -- <i>CHEM • TEL</i>)

PREVENTION OF ACCIDENTS IN THE USE OF EXPLOSIVES

The prevention of accidents in the use of explosives is a result of careful planning and observance of the best known practices. The explosives user must remember that he is dealing with a powerful force and that various devices and methods have been developed to assist him in directing this force. He should realize that this force, if misdirected, may either kill or injure both him and his fellow workers.

WARNING

All explosives are dangerous and must be carefully handled and used following approved safety procedures either by or under the direction of competent, experienced persons in accordance with all applicable federal, state, and local laws, regulations, or ordinances. If you have any questions or doubts as to how to use any explosive product, **DO NOT USE IT** before consulting with your supervisor, or the manufacturer, if you do not have a supervisor. If your supervisor has any questions or doubts, he should consult the manufacturer before use.

HAZARDOUS COMPONENTS			
Material or Component	CAS No.	TLV	PEL
TNT (Trinitrotoluene)	38082-89-2	1.5 MG/M ³	.5 MG/M ³
N/A = Not assigned NE = Not established			

PHYSICAL DATA	
Boiling Point	464° F
Vapor Pressure	.057 MPa @ 179° F
Vapor Density	N/A
Solubility in Water	Insoluble
Specific Gravity	1.5 - 1.6
Melting Point	176°F
Evaporation Rate	N/A
Appearance and Odor	Yellow Flakes, with bitter almond odor.

HAZARDOUS REACTIVITY	
Instability	Stable
Incompatibility	No data applicable
Hazardous decomposition	Nitrous Oxide
Polymerization	Polymerization will not occur

FIRE AND EXPLOSION DATA	
Flashpoint	Not applicable
Extinguishing media	None
Special fire fighting procedures	ALL EXPLOSIVES: DO NOT FIGHT EXPLOSIVES FIRES. Try to keep fire from reaching explosives. Isolate area. Guard against intruders. Division 1.1 Explosives: Evacuate the area for 5000 feet (1 mile). Consult <i>the 2000 Emergency Response Guidebook</i> , Guide 112 for further details.
Unusual fire and explosion hazards	Will detonate if suitably primed by heat or flame.

HEALTH HAZARDS	
General	<p>TNT is a Division 1.1 explosive, and detonation may cause severe physical injury, including death. All explosives are dangerous and must be handled carefully and used following approved safety procedures under the direction of competent, experienced persons in accordance with all applicable federal, state, and local laws, regulations, and ordinances.</p> <p>Inhalation of explosives powders may cause nervous system irregularities including headaches and dizziness.</p> <p>Nitrogen oxides generated during use are skin, eye, and respiratory tract irritants.</p>
Carcinogenicity	None of the components of TNT are listed as a carcinogen by NTP, IARC, or OSHA.

FIRST AID	
Inhalation	If detonation fumes are inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. If breathing is difficult, give oxygen and call a physician.
Eye and skin contact	Flush eyes with water. Wash skin with soap and water.
Ingestion	Induce vomiting immediately by giving two glasses of water and sticking finger down throat.
Injury from detonation	Seek prompt medical attention.

SPILL OR LEAK PROCEDURES	
Spill/leak response	Review fire and explosion hazards before proceeding with clean up. Remove all ignition sources. Wear protective equipment during clean up. Mop up with water.
Waste disposal	Dispose of in compliance with federal regulations under the authority of the <i>Resource Conservation and Recovery Act</i> (40 CFR Parts 260-271).

SPECIAL PROTECTION INFORMATION	
Ventilation	General ventilation with local exhaust in operation area.
Respiratory	Wear fitted NIOSH approved respirator, avoid dusting by keeping wet when possible .
Eye	Chemical goggles.
Gloves	Cotton or leather gloves
Other	Flame proof coveralls and conductive boots.

SPECIAL PRECAUTIONS	
Refer to manufacturer's instructions and warnings supplied with product.	

STORAGE CONDITIONS	
Store in accordance with the requirements of <i>Subpart K, ATF: Explosives Law and Regulations</i> (27 CFR 55.201-55.219).	

SHIPPING INFORMATION		
Proper shipping name	TNT	
Hazard class	1.1D	
UN Number	UN0209 (1.1D)	
DOT Label & Placard	DOT Label	EXPLOSIVE 1.1D
	DOT Placard	EXPLOSIVES 1.1

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