



IDENTITY (As used on Label and List)  
 Fuse Assembly (Cobra/Primafuse)  
 Section I

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that

Manufacturer's Name Compania Mexicana De Mecha Para Mines Zacatecas #120 Ote., Colonia "Las Roses" Gomez Palacio, Durango (Mexico)	Emergency Telephone Number 800-255-3924
	Telephone Number for Information 817-478-8888
	Date Prepared Feb. 2005
	Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	CAS #	% (optional)
Dinitrotoluene		1.5 mg/m <sup>3</sup>	0.15 mg/m <sup>3</sup>	2531-146
Dibutylphtalate		5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	84-72-2
Lead		0.05 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>	7439-92-1
Zinc Dust		15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	7440-66-6
Calcium Estearate		5 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	1305-78-8
Silicium Amorphous		6 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	7631-86-9
Charcoal		3.5 mg/m <sup>3</sup>	3.5 mg/m <sup>3</sup>	1333-86-4
Sulfur		none	none	7704-34-9
Potassium Nitrate		none	none	07757-79-1
PETN		N/A	N/A	78-11-5
Lead Stephnate				63918-67-8
Titanium Dioxide		0.10 mg/m <sup>3</sup>	0.10 mg/m <sup>3</sup>	13463-677

Section III - Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H2 = 1)	1.7
Vapor Pressure (mm Hg.)	N/A	Melting Point	200C
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	0%
Solubility in Water	Negligible		
Appearance and Odor	Aluminum shell containing PETN and an oderless white solid.		

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	N/A	Flammable Limits	N/A	LEL: N/A	UEL: N/A
Extinguishing Media	Do not try to extinguish fire. Detonators will explode when set on fire.				
Special Fire Fighting Procedures	Isolate the area and evacuate personnel to a safe distance.				

Unusual Fire and Explosion Hazards  
 Deonators will explode with violent release of gases when set on fire or submitted to severe impact or subjected to extreme high temperature. \*WARNING\* Electric detonators are vulnerable to static electricrity and radio frequencies!

Section V - Reactivity Data

Stability	Unstable	X	Conditions to Avoid	SEVERE IMPACT, EXTREME HEAT, EXTREME HIGH PRESSURE, STATIC ELECTRICITY AND RADIO FREQUENCIES.
	Stable			
Incompatibility (Materials to Avoid)	NO KNOWN CHEMICAL INCOMPATIBILITY			
Hazardous Decomposition or Byproducts	PRODUCES NITROGEN OXIDES WHEN DETONATED			
Hazardous Polymerization	May Occur		Conditions to Avoid	N/A
	Will Not Occur	X		

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation?	Irritation	Skin? Irritation	Ingestion?	May be toxic
Health Hazards (Acute and Chronic)	NONE				
Carcinogenicity:	NTP?	N/A	IARC Monographs?:	N/A	OSHA Regulated?:
Signs and Symptons of Exposure	N/A				
Medical Conditions Generally Aggravated by Exposure:	N/A				
Emergency and First Aid Procedures	In case of injury sustained by detonation, seek emergency medical care immediately				

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled  
 operations. Wear appropriate personal protection clothing. Review fire and explosion safety procedures prior to cleanup

Waste Disposal Method  
 Use only properly trained personnel and procedures. Consolut explosives manufacturer or consultant in case expert personnel are not available.

Precautions to Be Taken in Handling and Storing  
 Storage of explosives must comply with ATF regulations. Packaging, marking and labeling of explosives must comply with 49 CFR of the Department of Transportatation regulations.

Other Precautions  
 Refer to instructions and warning labels and literature provided by the manufacturer.

Section VIII - Control Measures

Respiratory Protection (Specify Type)	N/A	Protective Gloves	N/A
Eye Protection:	N/A	Other Protective Clothing or Equipment:	N/A
Ventilation	Local Exhaust	N/A	Special
	Mechanical (General)	N/A	Other
Work/Hygenic Practices	N/A		

All information in this MSDS has been obtained from sources considered reliable but is submitted without any warranties.