

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communications Standard 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor-Occupational Safety and Health Administration (Non-Mandatory Form)
Form Approved - OMB No. 1218-0072



IDENTITY (As used on Label and List) MANTELEC 1.83m,3m, 5m, ELECTRIC DETONATOR	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.
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Section I	
Manufacturer's Name ORICA BRASIL AV. INDUSTRIA QUIMICA MANTIQUEIRA, 317 BAIRRO PORTO DO MEIRA LORENA S.P. BRAZIL	Emergency Telephone Number 1-800-255-3924 Telephone Number for Information (817) 478-8888 Date Prepared Jan-07 Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information			
Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended (optional)
PENTARYTHRITE TETRANITRATE 500 mg	N/A	1.5mg/m3	N/A
LEAD AZIDE STYPHNATE 300 mg			

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 , AN ODORLESS 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. ELECTRIC 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
DETONATORS WILL EXPLODE WITH VIOLENT RELEASE OF GASES WHEN SET ON FIRE, SUBMITTED TO SEVERE IMPACT, OR SUBJCTED TO EXTREME HIGH TEMPERATURE.
**WARNING: THIS IS AN ELECTRIC DETONATOR AND IS VULNERABLE TO STATIC ELECTRICITY & RADIO FREQUENCIES!

(Reproduce locally)

IDENTITY (As used on lable and list) ELECTRIC DETONATOR RJ-215-IV			
Section V - Reactivity Data			
Stability	Unstable X Stable		Conditions to Avoid SEVERE IMPACT, EXTREME HEAT, EXTREME HIGH PRESSURE, STATIC ELECTRICITY AND RADIO FREQUENCIES.
Incompatibility (Materials to Avoid) NO KNOWN CHEMICAL INCOMPATIBILITY			
Hazardous Decomposition or Byproducts PRODUCES NITROGEN OXIDES WHEN DETONATED			
Hazardous Polymerization	May Occur Will Not Occur	X	Conditions to Avoid
Section VI - Health Hazard Data			
Route(s) of Entry:	Inhalation?	N/A	Skin? N/A Ingestion? N/A

Health Hazards (Acute and Chronic)	NONE		
Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	N/A	N/A	N/A
Signs and Symptoms of Exposure	N/A		
Medical Conditions	N/A		
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

REVIEW FIRE AND EXPLOSION SAFETY PROCEDURES BEFORE STARTING

CLEAN UP OPERATION. WEAR APPROPRIATE PERSONAL PROTECTION CLOTHING.

Waste Disposal Method

USE ONLY PROPERLY TRAINED PERSONNEL AND PROCEDURES. CONSULT EXPLOSIVES

MANUFACTURER OR CONSULTANT IN CASE EXPERT PERSONNEL IS NOT AVAILABLE.

Precautions to Be Taken in Handling and Storing

STORAGE OF EXPLOSIVES MUST COMPLY WITH ATF REGULATIONS. PACKAGING,

MARKING AND LABELING OF BOXES MUST COMPLY WITH 49 CFR DEPT. OF TRANSPORTATION 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

Ventilation	Local Exhaust	Special
	N/A	N/A
	Mechanical (General)	Other
	N/A	N/A

Protective Gloves	N/A	Eye Protection	N/A
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Other Protective Clothing or Equipment

N/A

Work/Hygenic Practices

N/A

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