

MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: Maxam North America, Inc.
6975 South Union Park Center, Suite 525
Salt Lake City, Utah 84047

EMERGENCY CONTACT: Day (800) 255-3924 or (801) 233-6000
Night (800) 255-3924

TRADE NAME(S): Signal Transmission Tubing, Shock Tube, LEAD-IN-LINE (LLL),
Zipline, RIOLINE™

CAS NUMBER: N/A

SECTION 2 – HAZARDOUS INGREDIENTS

Explosive components of this device are less than 0.4 percent by weight of the shock tube and are totally enclosed in the tubing.

MNX, Octagen, Cyclotetramethylene Tetranitramine C₄H₈N₈O₈, CAS No. 2691-41-0,
Aluminum. CAS No. 7429-90-5

SECTION 3 – PHYSICAL DATA

BOILING POINT: N/A

VAPOR PRESSURE (mm Hg): N/A

SPECIFIC GRAVITY (H₂O=1): N/A

VAPOR DENSITY (Air=1): N/A

PERCENT VOLATILE BY VOL. (%): None

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: Insoluable

APPEARANCE AND ODOR Flexible ionomer resin plastic tubing with a minute amount of an extremely fine, silver colored explosive composition on the interior walls of the tube. No odor.

SECTION 4 – FIRE AND EXPLOSION DATA

FLASH POINT: N/A

FLAMMABLE LIMITS: N/A

EXTINGUISHING MEDIA: Water, CO₂, foam, dry chemical fire extinguisher.

MATERIAL SAFETY DATA SHEET

UNUSUAL FIRE & EXPLOSION HAZARDS: Avoid toxic fumes from fire.

SPECIAL FIRE FIGHTING PROCEDURES: Not determined.

X SECTION 5 – HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: Not determined.

EFFECTS OF OVEREXPOSURE: Not determined..

EMERGENCY AND FIRST AID PROCEDURES: Fumes – Remove to fresh air.

X SECTION 6 – REACTIVITY DATA *Issued by the Safety and Compliance Department*

STABILITY: Stable.

INCOMPATIBILITY (MATERIALS TO AVOID): None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Gaseous Nitrogen Oxides, Carbon Oxides.

HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

X SECTION 7 – SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Pick up containers or units by hand.

WASTE DISPOSAL METHOD: Dispose of under direct supervision of a qualified person according to local, state and federal regulations. Call Maxam Initiation Systems for recommendations and assistance.

TRANSPORTATION EMERGENCIES INVOLVING SPILLS, LEAKS, FIRES, OR EXPOSURES CALL CHEMTEL: 1-800-255-3924.

X SECTION 8 – SPECIAL PROTECTION INFORMATION

RESPIRATORY: Avoid breathing fumes from detonation.

VENTILATION: Not required under normal conditions.

PROTECTIVE GLOVES: Not required.

EYE PROTECTION: Not required.

X SECTION 9 – SPECIAL PRECAUTIONS

COMPLY WITH “ALWAYS AND NEVER” AS ADOPTED BY THE INSTITUTE OF MAKERS OF EXPLOSIVES.

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TRANSPORTATION, STORAGE AND USE MUST COMPLY WITH OSHA SAFETY AND HEALTH STANDARDS 29 CFR 1910.109, APPLICABLE MSHA REGULATIONS, THE DOT AND HAZARDOUS MATERIALS REGULATIONS, BATF REQUIREMENTS AND STATE AND LOCAL TRANSPORTATION, STORAGE AND USE REGULATIONS AND ORDINANCES.

DOT CLASSIFICATION: Articles, Explosive, N.O.S. 1.4S, PG II (Contains HMX, Aluminum Powder)
UN NUMBER: UN0349
IMO HAZARD CLASS: 1.4S

None of the components are listed in the 1987 LARC Monographs, Group 1, 2A, or 2B as known, probably, or possible carcinogens, nor are they listed in the NTP annual report on carcinogens.