



MAXEL Instant Electric Detonator

SAFETY DATA SHEET – INITIATION SYSTEMS

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name:	NITRO SIBIR AUSTRALIA
Address:	Unit 218, 396 Scarborough Beach Road Osborne Park, WESTERN AUSTRALIA 6017
Telephone:	+61 417772219
Fax:	Not applicable
Emergency:	1800 884 289
Synonyms:	MAXEL
Use:	Initiation of explosive charge.
SDS Date:	August, 2014
TDS:	Nitro Sibir TDS Ref: IS03 MAXEL Instant Electric Detonator

2. Hazards Identification

Hazard Classification: CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF ASCC. CLASSIFIED AS DANGEROUS GOODS ACCORDING TO THE CRITERIA OF THE AUSTRALIAN CODE FOR THE TRANSPORT OF EXPLOSIVES BY ROAD AND RAIL.

RISK PHRASES:

R61: May cause harm to the unborn child.

R3: Extreme risk of explosion by shock, friction, fire or other sources of ignition.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES:

S53: Avoid exposure – obtain special instructions before use.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S60: This material and its container must be disposed of as hazardous waste.

S61: Avoid release to the environment. Refer to special instructions / Material Safety Data Sheet.

3. Composition / Information on Ingredients

Ingredient	CAS	Proportion
Cyclonite (Cyclotrimethylenetrinitramine, RDX)	121-82-4	< 5%
Lead Azide	13424-46-9	< 1%
Materials determined not to be hazardous	-	> 60%

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4. First Aid Measures

Eye:	If eye contact occurs, wash out immediately with running water. Continue flushing for several minutes. In all cases of eye contamination, it is sensible to seek medical advice and/or attention.
Inhalation:	If inhaled, remove from contaminated area. If symptoms develop, seek medical attention.
Ingestion:	Immediately rinse mouth with water. If swallowed DO NOT induce vomiting. Seek immediate medical assistance.
Skin:	If contact with skin occurs, immediately remove any contaminated clothing and wash area thoroughly with running water. Seek immediate medical assistance if irritation occurs.
Advice to Doctor:	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	DO NOT FIGHT FIRES. In the case of a small fire, if explosive is burning, immediately isolate area and evacuate personnel to a safe distance.
Hazards from Combustion Products:	On burning under confined or semi-confined conditions, this product will emit toxic and/or irritating oxides of carbon and nitrogen including carbon monoxide and carbon dioxide.
Precautions for Fire Fighters and Special Protective Equipment:	Explosive material. Avoid all ignition sources. Risk of explosion by shock, friction, fire or other sources of ignition. DO NOT FIGHT FIRES. A major fire may involve a risk of explosion. In case of small fire where the actual product is not involved, carefully remove explosives to a safe distance, otherwise immediately isolate area and evacuate personnel to a safe distance and allow to burn.
HAZCHEM CODE:	E

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	Shut off all possible ignition sources. Clear area of all unprotected personnel. Handle with care. Avoid friction and impact. Surplus or defective explosives must not be placed in any waterway, buried, thrown away, discarded or placed with rubbish. Destruction of explosives must be carried out by suitably qualified personnel. In all cases, detonation is the preferred method of disposal.
Spillage:	Contain the spill and ensure that material does not enter any drains or waterways. Collect with non-metallic, anti-spark implements and place in clean, approved containers which are then labelled and sealed.



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7. HANDLING AND STORAGE

Handling: Use the smallest possible amounts in designated areas with adequate ventilation. Handle with great care. DO NOT subject the material to impact, friction, heat or fire. Keep containers closed when not in use. Ensure radio transmitters, including mobile phones, are not allowed near electric detonators. Take precautionary measures against static discharge.

Storage: Store in a cool, dry, well ventilated magazine licenced for Class 1.1B explosives. Keep storage area free of sources of shock, friction, heat, ignition and combustible materials. Keep containers closed when not in use and securely sealed and protected against physical damage. Inspect regularly for damage and spills. Always keep in containers made of the same material as the supply container. Have appropriate fire extinguishers available in and near the storage area. Detonators should never be stored with explosives and must be stored separately in a detonator magazine or store. Do not attempt to disassemble. Store and transport in accordance with local, state and federal requirements.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Limits: No exposure value assigned for this specific material by SafeWork, Australia. Available exposure limits for ingredients are listed below:

Substance	STEL		TWA		Notice
	ppm	mg/m ³	ppm	mg/m ³	
Cyclonite (RDX)	-	-	-	1.5	(Sk)

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

STEL (Short Time Exposure Limit): The average airborne concentration over a 15-minute period which should not be exceeded at any time during a normal eight-hour working day.

'Sk' Notice: absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

Engineering Controls: When test firing, ensure sufficient ventilation to keep airborne levels below the exposure limits. Keep products in the original packaging when not in use to prevent exposure to external stimuli.

Eye Protection: Use safety glasses when handling and using this product.

Hand Protection: Wear gloves of impervious material (PVC or neoprene). Final choice of gloves will vary according to individual circumstances.

Body Protection: Wear appropriate clothing such as cotton overalls buttoned at neck and wrist. When this product is handled, the use of plastic aprons and safety shoes is recommended.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Aluminium tube closed at one end, capped at the other with a moulded plastic (PVC) or rubber seal with plastic coated, copper electric wires protruding from it.
Odour:	Odourless
Flammability:	Explosive material – avoid all ignition sources and sources of heat.
Flash Point:	Not applicable
Boiling Point:	Not applicable
Melting Point:	Not applicable
Evaporation Rate:	Not applicable
pH:	Not applicable
Vapour Density:	Not applicable
Specific Gravity:	Not available
Solubility (water):	Insoluble

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable under recommended conditions of storage. Extreme risk of explosion from shock, friction, fire or other sources of ignition.
Conditions to Avoid:	Avoid exposure to heat, sources of ignition, open flame, shock and friction. Avoid build up of static electricity. Avoid exposure to radio transmitters, including mobile phones. Do not attempt to disassemble.
Chemical Incompatibility:	Incompatible with other chemicals.
Hazardous Decomposition:	Thermal decomposition may result in the release of irritating and/or toxic fumes including oxides of carbon and nitrogen, and metal oxides.
Hazardous Reactions:	Explosive material. Can explode or detonate from heavy impact or excessive heating, particularly under confinement. Detonation may occur from electrical energy from an extraneous source (lightning, static electricity, stray currents, galvanic electricity or electromagnetic radiation). Electric detonators WILL initiate if the lead wires touch the aerial of a radio transmitter or mobile phone. Explosion creates the potential for shrapnel. Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information:	No data available for the actual product. The construction of this product should prevent any chemical contamination. No adverse health effects are expected if the product is handled in accordance with this Safety Data Sheet and the product label. The main hazard is the possibility of exposure to lead fumes when test firing detonators in a confined space or poorly ventilated area.
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Symptoms or effects that may arise if the product is mishandled and overexposure occurs include:

- Inhalation:** Initiation can cause the presence of lead fumes in air. Lead fumes may be irritating to mucous membranes and the respiratory tract.
- Ingestion:** Not a likely route of exposure due to product form. However, ingestion of the product will irritate the gastric tract causing nausea and vomiting.
- Skin:** Prolonged or repeated contact with skin may result in redness, itching and irritation.
- Eye:** Not a likely route of contact. However, contact may cause irritation and redness.
- Long Term Effects:** Long term exposure to low concentrations of lead (by any route) may result in blood effects, anaemia, central and peripheral nervous system damage, gastrointestinal disturbances, renal injury, foetotoxicity, developmental deficiencies in neonates and children, and testicular damage including decreased sperm count.
- Toxicological Data:** No LD50 data available for this product. Exposure to explosive charge material is unlikely. The main hazard is the possibility of exposure to lead fumes when test firing detonators in a poorly ventilated area. The effects of lead poisoning may not be apparent immediately but significant absorption over a period of time may produce adverse effects as noted previously due to the accumulation of lead in the body.

12. ECOLOGICAL INFORMATION

- Exotoxicity:** Avoid contaminating waterways. Contains lead compounds which can be harmful to the environment.
- Aquatic Toxicity:** No data available for this product.
- Persistence / Degradability:** No data available for this product.
- Mobility:** No data available for this product.
- Environmental Protection:** Prevent this material from entering waterways and drains.

13. DISPOSAL CONSIDERATIONS

- Waste Disposal:** Destruction of explosives must only be carried out by suitably qualified and licensed personnel. If necessary, the relevant Statutory Authorities must be notified. In all circumstances, detonation is the preferred method of disposal. Do not attempt to move detonators showing obvious signs of deterioration. Contact Nitro Sibir Australia or the relevant state dangerous goods branch.

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14. TRANSPORT CONSIDERATIONS



Classified as a Class 1 (Explosives) Dangerous Goods according to the Australian Code for the Transport of Explosives by Road and Rail.

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for Transport by Sea.

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for Transport by Air.

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG/IMO)	AIR TRANSPORT (IATA/ICAO)
UN No.:	0030	0030	0030
Proper Shipping Name:	DETONATORS, ELECTRIC, for blasting	DETONATORS, ELECTRIC, for blasting	DETONATORS, ELECTRIC, for blasting
DG Class:	1.1B	1.1B	1.1B
HAZCHEM Code:	E	Not Applicable	Not Applicable

Transport Information: Dangerous Goods of Class 1 (Explosives) are incompatible in a placard load with the following:

- Class 2.1 – Flammable Gas
- Class 2.2 – Non-flammable Non-toxic Gas
- Class 2.3 – Toxic Gas
- Class 3 – Flammable Liquid
- Class 4.1 – Flammable Solid
- Class 4.2 – Spontaneously Combustible Substance
- Class 4.3 – Dangerous When Wet Substance
- Class 5.1 – Oxidising Agent
- Class 5.2 – Organic Peroxide
- Class 6 – Toxic and Infectious Substance
- Class 7 – Radioactive Substance
- Class 8 – Corrosive
- Class 9 – Miscellaneous Dangerous Goods
- Fire Risk Substances

15. REGULATORY INFORMATION

Classification: Classified as Hazardous according to the criteria of National Occupational Health & Safety Commission (NOHSC) Australia.

Hazard Category: Toxic. Explosive.

Poisons Schedule: A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

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Inventory Listing(s): AICS (Australian Inventory of Chemical Substances): All components are listed on AICS.

16. OTHER INFORMATION

The information contained in this SDS is believed to be accurate and has been obtained from sources considered reliable. Users of this information should make their own investigations to determine the suitability of the information for their particular use or situation. NITRO SIBIR AUSTRALIA does not in any way warrant or imply the applicability, viability or use of this information to any person, for use in any situation.

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