

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:	MAXNEL MS, MAXNEL LP, MAXNEL Non Electric Detonators
Use:	Initiation of explosive charge.
SDS Date:	August, 2014
TDS:	Nitro Sibir TDS Ref: IS04 MAXNEL MS Shock Tube Detonators and IS05 MAXNEL LP Shock Tube Detonators

2. Hazards Identification

Classified as hazardous according to Safe Work Australia: HAZARDOUS CHEMICAL.

Classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Explosives by Road and Rail: DANGEROUS GOODS.

Classification of the Substance or Mixture:

Explosives – Division 1.1

Acute Toxicity, Oral – Category 3

Specific Target Organ Toxicity – Repeated Exposure, Inhalation – Category 1

Germ Cell Mutagenicity – Category 2

Toxic to Reproduction – Category 1A

Signal Word: Danger



Explosion Bomb



Skull and Crossbones



Health Hazard

Hazard Statement(s):

H201: Explosive; mass explosion hazard

H301: Toxic if swallowed.

H341: Suspected of causing genetic defects.

H360: May damage fertility or the unborn child.

H372: Causes damage to organs through prolonged or repeated exposure if inhaled.

Precautionary Statement(s):

Prevention:

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat/sparks/open flames/surfaces - No Smoking.



- P240: Ground/bond container and receiving equipment.
P250: Do not subject to grinding/shock/heat/friction/impact or electrical energy from external sources.
P264: Wash skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves, protective clothing, eye and face protection.

Response:

- P301+P310: IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P314: Get medical advice/attention if you feel unwell.
P321: Specific treatment (see first aid on Safety Data Sheet).
P330: Rinse mouth.
P370+380: In case of fire: evacuate area.
P372: Explosion risk in case of fire.
P373: DO NOT fight fire when fire reaches explosives.

Storage:

- P401: Store in a well-ventilated magazine licensed for Class 1.1B Explosives in accordance with Australian Standard AS2187.1
P405: Store locked up.

Disposal:

- P501: Dispose of contents in accordance with national/regional/local regulations.

POISONS SCHEDULE (SUSMP): None allocated.

3. Composition / Information on Ingredients

Ingredient	CAS	Proportion
Cyclonite (Cyclotrimethylenetrinitramine, RDX)	121-82-4	< 5%
Lead Azide	13424-46-9	< 1%
Silicon Powder	7440-21-3	< 1%
Red Lead (lead oxide red)	1314-41-6	< 1%
Materials determined not to be hazardous	-	> 60%

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.

MAXNEL MS & LP SERIES



SAFETY DATA SHEET – INITIATION SYSTEMS

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.

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.

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:

MAXNEL MS & LP SERIES

SAFETY DATA SHEET – INITIATION SYSTEMS



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: Use in a well ventilated area. 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 a chemical resistant apron where clothing is likely to be contaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Aluminium tube closed at one end with plastic tubing of varying length and colour protruding from the other end.
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. 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. Explosion creates the potential for schrapnel. 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.

Inhalation:

Inhalation of post-detonation reaction products could cause systemic effects.

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:

Exposure to post-detonation reaction products may cause irritation.

Eye:

Not a likely route of contact. However, contact may cause irritation and redness.

Long Term Effects:

Repeated exposure to post-detonation reaction products may lead to systemic effects such as respiratory tract irritation, ringing of the ears, dizziness, elevated blood pressure, blurred vision and tremours. Heavy metal (lead) poisoning may occur.

Toxicological Data:

No LD50 data available for this product. Exposure to explosive charge material is unlikely. Ingredient, lead azide, is classified as Toxic to reproduction.

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.

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, UN0360, Class 1.1B. Proper Shipping Name: DETONATOR ASSEMBLIES, NON-ELECTRIC for blasting.

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for Transport by Sea, UN0360, Class 1.1B. Proper Shipping Name: DETONATOR ASSEMBLIES, NON-ELECTRIC for blasting.

Transport by air is prohibited under the International Air Transport Association (IATA) Dangerous Goods Regulations for Transport by Air.

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 Safe Work Australia.

Hazard Category: Explosives – Division 1.1
Acute Toxicity, Oral – Category 3
Specific Target Organ Toxicity – Repeated Exposure, Inhalation – Category 1
Germ Cell Mutagenicity – Category 2
Toxic to Reproduction – Category 1A

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

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

MAXNEL MS & LP SERIES

SAFETY DATA SHEET – INITIATION SYSTEMS



16. OTHER INFORMATION

Revision Date: March 2017

Reason(s) for Issue: Changes to Safe Work Australia's requirements for Safety Data Sheets to align with the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) requirements.

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.

----- END OF SDS -----