Captive bolt activators
Safety Data Sheet

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1. Identification of Substance & Company

Product

Product name	Captive bolt activators
Other names	Cartridge 9x17mm, MAXX Tech (green = low, yellow=medium, red=extra strong)
Product codes	226308 Captive bolt act. MaxxT Green 50pk 226020 Captive bolt act. MaxxT Yellow 50pk 226022 Captive bolt act. MaxxT Red 50pk
HSNO approval	HSR100264
Approval description	CARTRIDGES FOR WEAPONS, BLANK
UN number	0014
DG Class	1.4S
Proper Shipping Name	CARTRIDGES FOR TOOLS, BLANK
Packaging group	NA
Limited Quantities	5kg
Hazchem code	NA
Uses	Cattle stunning ammunition

Company Details

Company	**Shoof International Ltd**	
Address	224 Laurent Road, Cambridge 3493 New Zealand	1 International Square Tullamarine VIC 3043 Australia
Telephone	+64 7 827 3902	+61 3 9907 3000
Fax	+64 7 823 0651	+61 3 9310 4760
Website	www.shoof.co.nz	www.shoof.com.au

NZ Emergency Telephone Number: 0800 POISON (0800 764 766)
Poisons Information Centre – Australia: 13 11 26

2. Hazard Identification

Approval

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR100264, CARTRIDGES FOR WEAPONS, BLANK). The substance has been classified as hazardous according to the criteria in the Hazardous substances (Hazard Classification) Notice 2020.

GHS 7 Classes Hazard Statements

Expl. Div. 1.4
Explosive compatibility group S

H204 - Fire or projection hazard.

SYMBOLS

WARNING

Other Classifications/Hazards – GHS 7

Extreme risk of explosion by shock, friction, fire or other sources of ignition. /. The cartridge contains the potentially hazardous components (primer and propellant powder), which are hermetically sealed from the environment so that they can only be released by destroying the product. Cartridge is covered on the top by green, yellow or red marking compound. /. Heat or impact against the primer and strong mechanical stress that lead to damage to the cartridge case or mechanical attempts to remove the primer cap can lead to immediate ignition.

Precautionary Statements

Prevention	P102 - Keep out of reach of children. P103 Read label before use. P210 Keep away from heat/sparks/open flames/hot surfaces and other ignition sources. No smoking. P234 Keep only in original container. P240 Ground/bond container and receiving equipment. P250 Do not subject to grinding/shock/friction. P280 Wear protective gloves/protective clothing/eye protection/face protection.
Response	P370+P380 - 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 accordance with the regulations.
Disposal	P501 - Dispose of contents/container in accordance with local/regional/national/international regulation.

3. Composition / Information on Ingredients

Component – Case:	**CAS/ Identification**	**Concentration**
Copper	7440-50-8	53.02-54.8%
Zinc	7440-66-6	19.92-21.7%
Component – Primer:	**CAS/ Identification**	**Concentration**
Barium Nitrate	10022-31-8	~31.5%
Antimony trisulphide	1345-04-6	~11%
Lead dioxide	1309-60-0	~7%
Tetracene	109-27-3	~5.5%
Lead Styphnate	15245-44-0	~41%
P.E.T.N	78-11-5	~4%
Component – Propellant:	**CAS/ Identification**	**Concentration**
Nitrocellulose	EINECS: 936-908-7	>60%
Nitroglycerine	55-63-0	<35%
Centralite	85-98-3	0-7%
Diphenylamine	122-39-4	<1.65%
Non hazardous additives	Mixture	<4%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. First Aid

General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

Recommended first aid facilities Ready access to running water is required. Accessible eyewash is required.

Exposure

Swallowed	IF SWALLOWED: Call a POISON CENTRE or doctor/physician immediately. Rinse mouth. Do NOT induce vomiting. Give a glass of water to drink.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of irritation consult a doctor.
Skin contact	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: get medical advice/attention. Take off contaminated clothing and wash before re-use.
Inhaled	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a doctor if you feel unwell.

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards:	Explosive material. Dangerous hazard when exposed to heat or flames. If the fire reaches the material, do not fight. Evacuate all people, including emergency responders from the area. Do not approach containers suspected to be hot. If safe to do so, remove containers from path of fire.
Suitable extinguishing substances:	Flooding quantities of water only. Fight fire from a safe distance, with adequate cover. Cool fire exposed containers with water spray. If the fire reaches the material, withdraw and let fire burn.
Unsuitable extinguishing substances:	unknown
Products of combustion:	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
Protective equipment:	Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat and eye protection.
Hazchem code:	NA

6. Accidental Release Measures

Containment	If greater than 200kg is stored, secondary containment and emergency plans to manage any potential spills must be in place. In all cases design storage to prevent discharge to storm water.
Emergency procedures	In the event of a large spill alert the fire brigade to location and give brief description of hazard. The material may react violently or explode. Shut off all possible sources of ignition and increase ventilation. Clear area of any unprotected personnel and move upwind. Consider evacuation of larger area. Wear protective equipment to prevent skin, eye and respiratory exposure. Contain material. Avoid dust creation. Do not subject material to mechanical shock. Prevent by whatever means possible any spillage from entering drains, sewers, or water courses. (If this occurs contact your regional council immediately).
Clean-up method	Collect material carefully (avoid mechanical shock and dust creation). and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.
Disposal	Collect recoverable material into labelled containers for recycling or salvage. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.
Precautions	Restrict access to site where spill has occurred until clean up is complete. Wear protective equipment to prevent skin and eye contamination and the inhalation of dusts, see section 8. Work up wind or increase ventilation.

7. Storage & Handling

Storage	Store locked up. Avoid storage of harmful substances with food. Store out of reach of children. Store in original container only. Do not store with combustible materials. Recommended storage temperature: 20°C. Containers should be kept closed and locked in order to minimise contamination. Keep from extreme heat and open flames. Avoid shock or friction. Avoid contact with incompatible substances as listed in Section 10. Containers (and outer packaging) must bear the prescribed labelling, including the Hazchem code, UN number, flammability warning and name of contents. Always wash hands with soap and water after handling. Work clothes should be laundered separately.
Handling	Handle with care - avoid bumps, friction and impact. Use spark free tools when handling. Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of vapour, dusts, mist or aerosols.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 3mg/m^3 for respirable particulates and 10mg/m^3 for inhalable particulates when limits have not otherwise been established.

NZ Workplace Exposure Stds	Ingredient	WES-TWA	WES-STEL
	Diphenylamine	5 mg/m^3 (skin)	10 mg/m^3
	lead compounds as Pb	0.05 mg/m^3 (carc, bio, oto)	-
	Antimony compounds as Sb	0.5 mg/m^3	-
	Barium compounds as Ba	0.5 mg/m^3	-
	Copper as Cu	0.01mg/m^3(respirable, dsen)	-

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

General
Personal Protective Equipment (PPE) should not be used as the primary means of exposure protection, except in the event of an accident or emergency situation or where all other means of protection have proven inadequate. Clean PPE after use or dispose of as appropriate. Store PPE for re-use in a clean place. Regular training on the correct use of PPE should be provided. In particular the correct fitting and use of respirators and where applicable the cleaning of respirators should be undertaken.
Wear hearing protection.

Eyes
Wear eye protection with using this article. Eye glasses with side protection or visor made of safety glass.

Skin
Protective gloves are not normally necessary. Wear anti-static footwear and clothing.

Respiratory
No personal respiratory protective equipment normally required. A respirator when airborne concentrations approach the WES (section 8). Respirators must have filters appropriate to the duty and comply with AS/NZS1716 and selected, used and maintained in accordance with AS/NS 1715. Use a respirator with a dust/particulate filter. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order. Fit testing and clear guidelines and training for use and maintenance of PPE are necessary.

WES Additional Information

Not applicable

9. Physical & Chemical Properties

Appearance	Solid, various colours
Odour	odourless
Odour Threshold	not determined
pH	no data
Freezing/melting point	no data
Boiling Point	no data
Flashpoint	no data
Flammability	no data
Upper & lower flammable limits	no data
Vapour pressure	no data
Vapour density	no data
Specific gravity/density	no data
Solubility	no data
Partition coefficient	no data
Auto-ignition temperature	no data
Decomposition temperature	no data
Viscosity	no data
Particle Characteristics	no data

10. Stability & Reactivity

Stability	Stable
Conditions to be avoided	Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames. Handle with care - avoid bumps, friction and impact.
Incompatible groups	Keep away from: strong acids, strong bases, e.g. Lye. Oil. aromatic carbon hydrides
Substance Specific Incompatibility	none known
Hazardous decomposition products	carbon monoxide, carbon dioxide, nitrous gases (NOx), metal oxides. Thermal decomposition can lead to the escape of irritating gases and vapours, lead and barium compounds.
Hazardous reactions	none known

11. Toxicological Information

Summary

This product is a cartridge, the physical nature of which makes absorption from any route unlikely. Once the cartridge is fired a small amount of inhalable particles may be created.
The components of this cartridge may have the following health effects:
Harmful if swallowed, may cause nausea and vomiting.
Irritating to skin and eyes.
May cause cancer, reproductive/developmental toxicity.
May affect organs through prolonged or repeated exposure.

Supporting Data

Acute	**Oral**	No data for the mixture. The classification criteria are not met.
	Dermal	No data for the mixture. The classification criteria are not met.
	Inhaled	No data for the mixture. The classification criteria are not met.
	Eye	No data for the mixture. The classification criteria are not met.
	Skin	No data for the mixture. The classification criteria are not met.
Chronic	**Sensitisation**	No data for the mixture. The classification criteria are not met.
	Mutagenicity	No data for the mixture. The classification criteria are not met.
	Carcinogenicity	No data for the mixture. The classification criteria are not met. Lead compounds and Antimony compounds present in the cartridges may cause cancer.
	Reproductive / Developmental	No data for the mixture. The classification criteria are not met. . Lead compounds and Antimony compounds present in the cartridges may affect reproductivity, fertility and development of the foetus
	Systemic	No data for the mixture. The classification criteria are not met.
	Aggravation of existing conditions	None known.

12. Ecological Data

Summary

Intact cartridge is not considered harmful in the aquatic environment, however the ingredients of the cartridges, if released may be toxic to aquatic organisms.

Supporting Data

Aquatic	No data for the mixture. The classification criteria are not met. Copper, zinc, lead compounds and nitroglycerin are toxic to various aquatic organisms.
Bioaccumulation	No data
Degradability	No data
Soil	No evidence of soil toxicity.
Terrestrial vertebrate	See acute toxicity.
Terrestrial invertebrate	No evidence of ecotoxicity towards terrestrial invertebrates.
Biocidal	No data
Environmental effect levels	No EELs are available for this mixture or ingredients

13. Disposal Considerations

Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
Disposal method	Disposal of this product must comply with the Hazardous Substances (Disposal) Notice 2017 and the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment. Do not deposit in a landfill or sewage facility. Do not detonate to dispose of this substance.
Contaminated packaging	Disposal of contaminated packaging must comply with the Hazardous Substances (Disposal) Notice 2017 clause 12. Ensure that the package is rendered incapable of containing any substance and is disposed in a manner that is consistent with the requirements of the substance it contained and the material of the package. If possible reuse or recycle packaging.

14. Transport Information

Land Transport Rule: Dangerous Goods 2005 - NZS 5433:2007
Transport according to NZS 5433 (Transport of Hazardous Substances on Land). Considered a dangerous good for transport.

UN number:	0014	**Proper shipping name:**	CARTRIDGES FOR TOOLS, BLANK
Class(es)	1.4S	**Packing group:**	NA
Precautions:	Explosive	**Hazchem code:**	NA
Limited quantities	5kg		

15. Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR100264, CARTRIDGES FOR WEAPONS, BLANK. All ingredients appear on the New Zealand Inventory of Chemicals NZIoC.

Specific Controls

Key workplace requirements are:	
SDS	To be available within 10 minutes in workplaces storing any quantity.
Inventory	An inventory of all hazardous substances must be prepared and maintained.
Packaging	All hazardous substances should be appropriately packaged including substances that have been decanted, transferred or manufactured for own use or have been supplied.
Labelling	Must comply with the Hazardous Substances (Labelling) Notice 2017.
Controlled substance licence	Exempt.
Emergency plan	Required if > 200kg is stored.
Certified handler	Exempt
Tracking	Exempt.
Bunding & secondary containment	Required if > 200kg is stored.
Signage	Required if > 5000kg is stored.
Location compliance certificate	Required if > 10000kg is stored.
Flammable zone	Not required.
Fire extinguisher	If > 50kg present.

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

16. Other Information

Abbreviations

Approval Code	Approval HSR100264, CARTRIDGES FOR WEAPONS, BLANK Controls, EPA. www.epa.govt.nz
AICS	Australian Inventory of Chemical Substances
CAS Number	Unique Chemical Abstracts Service Registry Number
EC_{50}	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
EPA	Environmental Protection Authority (New Zealand)
GHS	Globally Harmonised System of Classification and Labelling of Chemicals, 7th revised edition, 2017, published by the United Nations.
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD_{50}	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC_{50}	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
NZIoC	New Zealand Inventory of Chemicals
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
STOT RE	Specific Target Organ Toxicity – Repeated Exposure
STOT SE	Specific Target Organ Toxicity – Single Exposure
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
UN Number	United Nations Number
WES	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone.

References

Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).
Controls	EPA notices, www.epa.govt.nz, Health and Safety at Work (Hazardous Substances) Regulations 2017, www.legislation.govt.nz
WES	The latest NZ Workplace Exposure Standards, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz.
Other References:	EU ECHA, ingredients SDS's, ChemIDplus, old SDS

Review

Date	**Reason for review**
September 2025	Not applicable – new SDS

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