

Combined Systems Model 4561 40mm Wood Baton Smokeless

Winchester Australia Ltd

Chemwatch Hazard Alert Code: 4

Chemwatch: 5373-13

Issue Date: 05/10/2019

Version No: 2.1.1.1

Print Date: 07/10/2019

Safety Data Sheet according to WHS and ADG requirements

L.GHS.AUS.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	Combined Systems Model 4561 40mm Wood Baton Smokeless
Synonyms	Model: 4561
Proper shipping name	CARTRIDGES FOR WEAPONS, INERT PROJECTILE or CARTRIDGES, SMALL ARMS
Other means of identification	Not Available

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Explosive product.
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Details of the supplier of the safety data sheet

Registered company name	Winchester Australia Ltd
Address	65 Hays Road Moolap, Geelong VIC 3224 Australia
Telephone	+61 3 5245 2400
Fax	+61 3 5248 2409
Website	Not Available
Email	aedmondson@olin.com.au

Emergency telephone number

Association / Organisation	Winchester Australia
Emergency telephone numbers	0418 158 337 All hours
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.


CHEMWATCH HAZARD RATINGS

	Min	Max
Flammability	1	1
Toxicity	0	0
Body Contact	0	0
Reactivity	4	4
Chronic	0	0

0 = Minimum
 1 = Low
 2 = Moderate
 3 = High
 4 = Extreme

Poisons Schedule	Not Applicable
Classification ^[1]	Explosive Division 1.4, Self Reactive Type A
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Label elements

Hazard pictogram(s)	
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SIGNAL WORD **DANGER**

Hazard statement(s)

H204	Fire or projection hazard.
H240	Heating may cause an explosion.

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Precautionary statement(s) Prevention

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P234	Keep only in original container.
P250	Do not subject to grinding/shock/sources of friction.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P220	Keep/Store away from clothing/organic material/combustible materials.
P240	Ground/bond container and receiving equipment.

Precautionary statement(s) Response

P370+P380	In case of fire: Evacuate area.
P370+P380+P375	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.
P372	Explosion risk in case of fire.
P374	Fight fire with normal precautions from a reasonable distance.
P373	DO NOT fight fire when fire reaches explosives.
P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam for extinction.

Precautionary statement(s) Storage

P403+P235	Store in a well-ventilated place. Keep cool.
P411	Store at temperatures not exceeding 30°C/86°F (see storage requirements on SDS).
P401	Store according to local regulations for explosives.
P420	Store away from other materials.

Precautionary statement(s) Disposal

P501	Dispose of contents/container in accordance with local regulations.
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
9004-70-0	25-50	<u>nitrocellulose</u>
55-63-0	25-50	<u>nitroglycerin</u>
8050-09-7	2.5-10	<u>rosin-colophony</u>
12403-82-6	<=2.5	<u>lead styphnate, monobasic</u>

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	<p>If this product comes in contact with eyes:</p> <ul style="list-style-type: none"> ▶ Wash out immediately with water. ▶ If irritation continues, seek medical attention. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	<p>If skin or hair contact occurs:</p> <ul style="list-style-type: none"> ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	<ul style="list-style-type: none"> ▶ If fumes or combustion products are inhaled remove from contaminated area. ▶ Lay patient down. Keep warm and rested. ▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ▶ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. ▶ Transport to hospital, or doctor.
Ingestion	<ul style="list-style-type: none"> ▶ Not considered a normal route of entry. <p>Not normally a hazard due to physical form of product.</p>

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

DANGER: Deliver media remotely.

- ▶ For minor fires: Flooding quantities only.
- ▶ For large fires: **Do not attempt to extinguish.**

Special hazards arising from the substrate or mixture

Fire Incompatibility	<ul style="list-style-type: none"> ▶ Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.
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Advice for firefighters

Fire Fighting	<p>WARNING: EXPLOSIVE MATERIALS / ARTICLES PRESENT!</p> <ul style="list-style-type: none"> ▶ Evacuate all personnel and move upwind. ▶ Prevent re-entry. ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ May be explosively reactive, detonate and release much heat. ▶ Wear full-body protective clothing with breathing apparatus. ▶ Prevent, by any means available, spillage and fire effluent from entering drains or watercourses. ▶ Fight from safe distances and protected locations. ▶ Use flooding quantities of water. ▶ DO NOT approach containers suspected to be hot. ▶ Cool any exposed containers not involved in fire from protected locations. ▶ Equipment should be thoroughly decontaminated after use.
Fire/Explosion Hazard	<p>Individual devices will randomly explode. Will not mass explode if multiple devices are involved. Division 1.4 Substances, mixtures and articles which present no significant hazard: substances, mixtures and articles which present only a small hazard in the event of ignition or initiation. The effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire shall not cause virtually instantaneous explosion of almost the entire contents of the package. Compatibility Group C explosives are propellant explosive substances or other deflagrating explosive substances or article containing such explosive substances.</p> <p>Decomposition may produce toxic fumes of: nitrogen oxides (NOx) carbon monoxide (CO) carbon dioxide (CO2) metal oxides</p>
HAZCHEM	1YE

SECTION 6 ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	<p>WARNING: EXPLOSIVE. BLAST and/or PROJECTION and/or FIRE HAZARD</p> <ul style="list-style-type: none"> ▶ Clean up all spills immediately. ▶ Avoid inhalation of the material and avoid contact with eyes and skin. ▶ Wear impervious gloves and safety glasses. ▶ Remove all ignition sources. ▶ Use spark-free tools when handling. ▶ Sweep into non-sparking containers or barrels and moisten with water. ▶ Place spilled material in clean, sealable, labelled container for disposal. ▶ Flush area with large amounts of water.
Major Spills	<p>WARNING: EXPLOSIVE.</p> <ul style="list-style-type: none"> ▶ Clear area of personnel and move upwind. ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ May be violently or explosively reactive. ▶ Wear full body protective clothing with breathing apparatus. ▶ Consider evacuation (or protect in place). ▶ In case of transport accident notify Police, Emergency Authority, Competent Explosives Authority or Manufacturer. ▶ No smoking, naked lights, heat or ignition sources. ▶ Increase ventilation. ▶ Use extreme caution to prevent physical shock. ▶ Use only spark-free shovels and explosion-proof equipment. ▶ Collect recoverable material and segregate from spilled material. ▶ Wash spill area with large quantities of water.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE**Precautions for safe handling**

Safe handling	<p>Under normal handling, no exposure to harmful materials will occur.</p> <ul style="list-style-type: none"> ▶ Handle gently. Use good occupational work practice. ▶ Observe manufacturer's storage and handling recommendations contained within this SDS. ▶ Avoid all personal contact, including inhalation. ▶ Avoid smoking, naked lights, heat or ignition sources. ▶ Explosives must not be struck with metal implements. ▶ Avoid mechanical and thermal shock and friction. ▶ Use in a well ventilated area. ▶ Avoid contact with incompatible materials. ▶ When handling DO NOT eat, drink or smoke. ▶ Avoid physical damage to containers.
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	<ul style="list-style-type: none"> ▶ Always wash hands with soap and water after handling. ▶ Work clothes should be laundered separately.
Other information	<ul style="list-style-type: none"> ▶ Store cases in a well ventilated magazine licensed for the appropriate Class, Division and Compatibility Group. ▶ Rotate stock to prevent ageing. Use on FIFO (first in-first out) basis. ▶ Observe manufacturer's storage and handling recommendations contained within this SDS. ▶ Store in a cool place in original containers. ▶ Keep containers securely sealed. ▶ No smoking, naked lights, heat or ignition sources. ▶ Store in an isolated area away from other materials. ▶ Keep storage area free of debris, waste and combustibles. ▶ Protect containers against physical damage. ▶ Check regularly for spills and leaks <p>NOTE: If explosives need to be destroyed contact the Competent Authority.</p>

Conditions for safe storage, including any incompatibilities

Suitable container	Store in original containers.
Storage incompatibility	<ul style="list-style-type: none"> ▶ Reacts with acids producing flammable / explosive hydrogen (H2) gas ▶ Avoid reaction with oxidising agents ▶ Avoid strong acids, acid chlorides, acid anhydrides and chloroformates. strong alkalis



X + X X X X X

X — Must not be stored together
0 — May be stored together with specific preventions
+ — May be stored together

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	nitroglycerin	Nitroglycerine (NG)	0.05 ppm / 0.46 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
nitroglycerin	Nitroglycerin	0.1 mg/m3	2 mg/m3	75 mg/m3
rosin-colophony	Rosin core solder decomposition products; (Colophony Gum)	72 mg/m3	790 mg/m3	1,500 mg/m3

Ingredient	Original IDLH	Revised IDLH
nitrocellulose	Not Available	Not Available
nitroglycerin	75 mg/m3	Not Available
rosin-colophony	Not Available	Not Available
lead styphnate, monobasic	100 mg/m3	Not Available

MATERIAL DATA

Exposure controls

Appropriate engineering controls	<p>Engineering controls for explosive articles are designed to reduce or eliminate fragmentation and/or blast effects either by suppression of the source of detonation or by protection at the exposed location, or both. Barricades, shields, contained detonation chambers, and "zero quantity-distance (Q-D)" magazines are examples of engineering controls.</p> <p>Engineering controls are designed and tested in a rigorous fashion. The construction of the engineering control must be carefully duplicated in field applications to assure it will function properly.</p> <p>It is thus imperative that engineering controls be built exactly in accordance with the design package, and that they be used only for the articles (e.g.munitions) for which they are authorised.</p>
Personal protection	
Eye and face protection	<ul style="list-style-type: none"> ▶ Safety glasses with side shields; or as required, ▶ Chemical goggles. ▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]
Skin protection	See Hand protection below

Hands/feet protection	<p>Wear physical protective gloves, e.g. leather</p> <ul style="list-style-type: none"> ▶ Heavy weight Rubber gloves ▶ Rubber boots <p>- Non-sparking or conductive footwear essential. Conductive footwear describes a boot or shoe with a sole made from a conductive compound chemically bound to the bottom components, for permanent control to electrically ground the foot and shall dissipate static electricity from the body to reduce the possibility of ignition of volatile compounds. Electrical resistance must range between 0 to 500,000 ohms. Conductive shoes should be stored in lockers close to the room in which they are worn. Personnel who have been issued conductive footwear should not wear them from their place of work to their homes and return.</p>
Body protection	See Other protection below
Other protection	Ear protection.

Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	A-AUS P2	-	A-PAPR-AUS / Class 1 P2
up to 50 x ES	-	A-AUS / Class 1 P2	-
up to 100 x ES	-	A-2 P2	A-PAPR-2 P2 ^

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO₂), G = Agricultural chemicals, K = Ammonia(NH₃), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Dark grey solid.		
Physical state	Manufactured	Relative density (Water = 1)	Not Applicable
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Applicable	Viscosity (cSt)	Not Applicable
Initial boiling point and boiling range (°C)	Not Applicable	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Applicable	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Applicable
Vapour pressure (kPa)	Not Applicable	Gas group	Not Available
Solubility in water	Not Applicable	pH as a solution (1%)	Not Applicable
Vapour density (Air = 1)	Not Applicable	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	<p>Cartridge may detonate if case is punctured or severely damaged.</p> <ul style="list-style-type: none"> ▶ Presence of shock and friction ▶ Presence of open flame
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Not normally a hazard due to physical form of product.
Ingestion	Not normally a hazard due to physical form of product.
Skin Contact	Not normally a hazard due to physical form of product.

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Eye	Not normally a hazard due to physical form of product.	
Chronic	Explosive components are completely sealed within the cartridge. Under normal handling of this product, no exposure to harmful materials will occur.	
Combined Systems Model 4561 40mm Wood Baton Smokeless	TOXICITY	IRRITATION
	Not Available	Not Available
nitrocellulose	TOXICITY	IRRITATION
	Oral (rat) LD50: >5000 mg/kg ^[2]	Not Available
nitroglycerin	TOXICITY	IRRITATION
	dermal (rat) LD50: =29.2 mg/kg ^[2] Oral (rat) LD50: 105 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1] Skin: adverse effect observed (irritating) ^[1]
rosin-colophony	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1] Oral (rat) LD50: >1000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1] Skin: no adverse effect observed (not irritating) ^[1]
lead styphnate, monobasic	TOXICITY	IRRITATION
	Not Available	Not Available
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. * Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances	

NITROGLYCERIN	<p>The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.</p> <p>The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.</p> <p>Substance has been investigated as a tumorigen, mutagen and reproductive effector. Equivocal tumorigen by RTECS criteria. Reproductive effector in rats.</p>
NITROCELLULOSE & LEAD STYPHNATE, MONOBASIC	No significant acute toxicological data identified in literature search.
ROSIN-COLOPHONY & LEAD STYPHNATE, MONOBASIC	<p>The following information refers to contact allergens as a group and may not be specific to this product.</p> <p>Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact. From a clinical point of view, substances are noteworthy if they produce an allergic test reaction in more than 1% of the persons tested.</p>

Acute Toxicity	✘	Carcinogenicity	✘
Skin Irritation/Corrosion	✘	Reproductivity	✘
Serious Eye Damage/Irritation	✘	STOT - Single Exposure	✘
Respiratory or Skin sensitisation	✘	STOT - Repeated Exposure	✘
Mutagenicity	✘	Aspiration Hazard	✘

Legend: ✘ – Data either not available or does not fill the criteria for classification
 ✔ – Data available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
Combined Systems Model 4561 40mm Wood Baton Smokeless	Not Available	Not Available	Not Available	Not Available	Not Available
nitrocellulose	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	EC50	96	Algae or other aquatic plants	579mg/L	4
nitroglycerin	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	1.38mg/L	4
	EC50	48	Crustacea	46mg/L	4
	EC50	96	Algae or other aquatic plants	0.4mg/L	4
	BCF	192	Fish	0.42mg/L	4
	NOEC	1440	Fish	0.03mg/L	2

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	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE	
	rosin-colophony	LC50	96	Fish	0.144mg/L	3
		EC50	48	Crustacea	>2-mg/L	2
		EC50	96	Algae or other aquatic plants	0.031mg/L	2
		NOEC	96	Algae or other aquatic plants	0.013mg/L	2
lead styphnate, monobasic	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE	
	Not Available	Not Available	Not Available	Not Available	Not Available	

Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
nitroglycerin	LOW (Half-life = 14 days)	LOW (Half-life = 0.73 days)
rosin-colophony	HIGH	HIGH

Bioaccumulative potential

Ingredient	Bioaccumulation
rosin-colophony	HIGH (LogKOW = 6.4607)

Mobility in soil

Ingredient	Mobility
rosin-colophony	LOW (KOC = 21990)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	<ul style="list-style-type: none"> Explosives must not be thrown away, buried, discarded or placed with garbage. Explosives which are surplus, deteriorated or considered unsafe for transport, storage or use shall be destroyed and the statutory authorities shall be notified. This material may be disposed of by burning or detonation but the operation may only be performed under the control of a person trained in the safe destruction of explosives.
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SECTION 14 TRANSPORT INFORMATION

Labels Required

	
Marine Pollutant	NO
HAZCHEM	1YE

Land transport (ADG)

UN number	0339
UN proper shipping name	CARTRIDGES FOR WEAPONS, INERT PROJECTILE or CARTRIDGES, SMALL ARMS
Transport hazard class(es)	Class : 1.4C
	Subrisk : Not Applicable
Packing group	Not Applicable
Environmental hazard	Not Applicable
Special precautions for user	Special provisions : Not Applicable
	Limited quantity : 0

Air transport (ICAO-IATA / DGR)

UN number	0339
UN proper shipping name	Cartridges for weapons, inert projectile; Cartridges, small arms

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Transport hazard class(es)	ICAO/IATA Class	1.4C
	ICAO / IATA Subrisk	Not Applicable
	ERG Code	1L
Packing group	Not Applicable	
Environmental hazard	Not Applicable	
Special precautions for user	Special provisions	Not Applicable
	Cargo Only Packing Instructions	130
	Cargo Only Maximum Qty / Pack	75 kg
	Passenger and Cargo Packing Instructions	Forbidden
	Passenger and Cargo Maximum Qty / Pack	Forbidden
	Passenger and Cargo Limited Quantity Packing Instructions	Forbidden
	Passenger and Cargo Limited Maximum Qty / Pack	Forbidden

Sea transport (IMDG-Code / GGVSee)

UN number	0339	
UN proper shipping name	CARTRIDGES FOR WEAPONS, INERT PROJECTILE or CARTRIDGES, SMALL ARMS	
Transport hazard class(es)	IMDG Class	1.4C
	IMDG Subrisk	Not Applicable
Packing group	Not Applicable	
Environmental hazard	Not Applicable	
Special precautions for user	EMS Number	F-B , S-X
	Special provisions	Not Applicable
	Limited Quantities	0

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

NITROCELLULOSE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List
 Australia Dangerous Goods Code (ADG Code) - Goods Too Dangerous To Be Transported
 Australia Explosives Code (AE Code)
 Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
 Australia Inventory of Chemical Substances (AICS)

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix A
 International Air Transport Association (IATA) Dangerous Goods Regulations
 International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft
 International Maritime Dangerous Goods Requirements (IMDG Code)
 United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

NITROGLYCERIN IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List
 Australia Dangerous Goods Code (ADG Code) - Goods Too Dangerous To Be Transported
 Australia Explosives Code (AE Code)
 Australia Exposure Standards
 Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
 Australia Inventory of Chemical Substances (AICS)
 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix A

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix G
 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 3
 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4
 International Air Transport Association (IATA) Dangerous Goods Regulations
 International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft
 International Maritime Dangerous Goods Requirements (IMDG Code)
 United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

ROSIN-COLOPHONY IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
 Australia Inventory of Chemical Substances (AICS)
 GESAMP/EHS Composite List - GESAMP Hazard Profiles

IMO IBC Code Chapter 17: Summary of minimum requirements
 IMO MARPOL (Annex II) - List of Noxious Liquid Substances Carried in Bulk

LEAD STYHPNATE, MONOBASIC IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List
 Australia Explosives Code (AE Code)
 Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 10 / Appendix C
 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
 International Air Transport Association (IATA) Dangerous Goods Regulations
 International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft
 International Maritime Dangerous Goods Requirements (IMDG Code)
 United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

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National Inventory Status

National Inventory	Status
Australia - AICS	No (lead styphnate, monobasic)
Canada - DSL	No (lead styphnate, monobasic)
Canada - NDSL	No (nitrocellulose; rosin-colophony; nitroglycerin)
China - IECSC	No (lead styphnate, monobasic; nitroglycerin)
Europe - EINEC / ELINCS / NLP	No (nitrocellulose)
Japan - ENCS	No (rosin-colophony; lead styphnate, monobasic)
Korea - KECI	Yes
New Zealand - NZIoC	No (lead styphnate, monobasic)
Philippines - PICCS	No (lead styphnate, monobasic)
USA - TSCA	Yes
Taiwan - TCSI	No (lead styphnate, monobasic)
Mexico - INSQ	No (lead styphnate, monobasic)
Vietnam - NCI	No (lead styphnate, monobasic)
Russia - ARIPS	No (lead styphnate, monobasic)
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Revision Date	05/10/2019
Initial Date	05/10/2019

SDS Version Summary

Version	Issue Date	Sections Updated
2.1.1.1	05/10/2019	Classification, Fire Fighter (fire/explosion hazard), Ingredients, Synonyms

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC – TWA: Permissible Concentration-Time Weighted Average
 PC – STEL: Permissible Concentration-Short Term Exposure Limit
 IARC: International Agency for Research on Cancer
 ACGIH: American Conference of Governmental Industrial Hygienists
 STEL: Short Term Exposure Limit
 TEEL: Temporary Emergency Exposure Limit,
 IDLH: Immediately Dangerous to Life or Health Concentrations
 OSF: Odour Safety Factor
 NOAEL :No Observed Adverse Effect Level
 LOAEL: Lowest Observed Adverse Effect Level
 TLV: Threshold Limit Value
 LOD: Limit Of Detection
 OTV: Odour Threshold Value
 BCF: BioConcentration Factors
 BEI: Biological Exposure Index

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