

Powers Powerloads

Stanley Black & Decker Australia Pty Ltd (Powers)

Chemwatch: 4585-57

Version No: 7.1.1.1

Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 4

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Initial Date: Not Available

S.GHS.AUS.EN

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

Product Identifier

Product name	Powers Powerloads
Synonyms	250 Green Weak Load, 251 Yellow Medium Load, 252 Red Strong Load, 253 Purple Very Strong Load, 254 White Especially Strong Load, 371 Green Weak Load, 372 Yellow Medium Load, 373 Red Strong Load, Blount Incorporated, CCI-Speer, Cash Knockers, Cow Punchers, D619 Brown Minimum Load, D620 Green Weak Load, D621 Yellow Medium Load, D922 Red Strong Load, Industrial Cartridges, Industrial Loads, Noise Blanks, Stud Drivers, T19 Brown Minimum Load, T20 Green Weak Load, T21 Yellow Medium Load, T22 Red Strong Load, T23 Purple Very Strong Load, T24 White Especially Strong Load, propellant containers
Proper shipping name	CARTRIDGES, POWER DEVICE†
Other means of identification	Not Available

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

Relevant identified uses	22, 25, 27 calibre construction tool propellant containers for explosive actuated tools (bolt guns). These charges should be used only by registered qualified operators for use in approved tools and as otherwise provided for in relevant State Regulations; for example Victorian Occupational Health Safety (Explosive-Powered Tools) Regulations 1985 and subsequent amendments. The Risk phrases are for the propellant powder content of the cartridges. The intact, sealed cartridges are Non-hazardous according to NOHSC criteria.
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Details of the manufacturer/importer

Registered company name	Stanley Black & Decker Australia Pty Ltd (Powers)
Address	Factory 3, 205 Abbots Road Dandenong South 3175 VIC Australia
Telephone	+61 3 8795 4600
Fax	+61 3 8787 5899
Website	http://www.powers.com.au
Email	Not Available

Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	1800 039 008
Other emergency telephone numbers	Not Available

CHEMWATCH EMERGENCY RESPONSE

Primary Number	Alternative Number 1	Alternative Number 2
1800 039 008	+612 9186 1132	Not Available

Once connected and if the message is not in your preferred language then please dial 01

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

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

Poisons Schedule	Not Applicable
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GHS Classification ^[1]	Explosive Division 1.4, Acute Toxicity (Oral) Category 2, Acute Toxicity (Dermal) Category 1, Acute Toxicity (Inhalation) Category 2, Reproductive Toxicity Category 1A, STOT - RE Category 2, Acute Aquatic Hazard Category 2
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Label elements

GHS label elements	  
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SIGNAL WORD	DANGER
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Hazard statement(s)

H204	Fire or projection hazard
H300	Fatal if swallowed
H310	Fatal in contact with skin
H330	Fatal if inhaled
H360	May damage fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H401	Toxic to aquatic life

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P250	Do not subject to grinding/shock/sources of friction.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P262	Do not get in eyes, on skin, or on clothing.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
P240	Ground/bond container and receiving equipment.
P273	Avoid release to the environment.
P284	[In case of inadequate ventilation] wear respiratory protection.

Precautionary statement(s) Response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.
P370+P380	In case of fire: Evacuate area.
P372	Explosion risk in case of fire.
P374	Fight fire with normal precautions from a reasonable distance.
P302+P350	IF ON SKIN: Gently wash with plenty of soap and water.
P373	DO NOT fight fire when fire reaches explosives.

Precautionary statement(s) Storage

P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P401	Store according to local regulations for explosives

Precautionary statement(s) Disposal

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P501 Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
		shell as
7440-50-8	45-60	<u>copper</u>
7440-66-6	21-26	<u>zinc</u>
		propellant as
9004-70-0	7-17	<u>nitrocellulose</u>
55-63-0	5-11	<u>nitroglycerin</u>
		priming mix/primer as
63918-97-8	<1	<u>lead styphnate</u>
109-27-3	<1	<u>guanyl nitrosaminoquanyltetrazene</u>
10022-31-8	<1	<u>barium nitrate</u>

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with eyes: - 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	If skin contact occurs: - Immediately remove all contaminated clothing, including footwear. - Flush skin and hair with running water (and soap if available). - Seek medical attention in event of irritation.
Inhalation	- 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	Not considered a normal route of entry. - For advice, contact a Poisons Information Centre or a doctor at once. - Urgent hospital treatment is likely to be needed. If swallowed do NOT induce vomiting. - If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. - Observe the patient carefully. - Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. - Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. - Transport to hospital or doctor without delay.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- Flooding quantities of water only.

Special hazards arising from the substrate or mixture

- | | |
|-----------------------------|--|
| Fire Incompatibility | <ul style="list-style-type: none"> Avoid strong acids, bases. |
|-----------------------------|--|

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Advice for firefighters

Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard. ▶ May be violently or explosively reactive. ▶ Wear breathing apparatus plus protective gloves. ▶ Prevent, by any means available, spillage from entering drains or water courses. ▶ Consider evacuation (or protect in place). Fight fire from a safe distance, with adequate cover. Cool fire exposed containers with water spray from a protected location.
Fire/Explosion Hazard	Explosive/Dangerous hazard when exposed to heat or flame Decomposes on heating and produces toxic fumes of; carbon monoxide (CO), nitrogen oxides (NOx) Product may explode if heated above 200 deg. C.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Clean up all spills immediately. Avoid contact with skin and eyes. Wear impervious gloves and safety glasses. Remove all ignition sources. Use dry clean up procedures and avoid generating dust. Place in clean drum then flush area with water.
Major Spills	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 breathing apparatus plus protective gloves. ▶ Prevent, by any means available, spillage from entering drains or water courses. ▶ Consider evacuation (or protect in place). No smoking, naked lights or ignition sources. Increase ventilation.
	Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Avoid all personal contact, including inhalation Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area ▶ Avoid smoking, naked lights, heat or ignition sources Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Must not be struck by metal implements. Avoid shock and friction. Use spark-free tools when handling Keep containers securely sealed when not in use Always wash hands with soap and water after handling. Work clothes should be laundered separately.
Other information	▶ Store in original containers. ▶ Keep containers securely sealed as supplied. ▶ No smoking, naked lights, heat or ignition sources. ▶ Store in a cool, dry, well ventilated area. ▶ Store under cover and away from sunlight. ▶ Store below safe storage (control) temperature. ▶ Store away from flammable or combustible materials, debris and waste.

Conditions for safe storage, including any incompatibilities

Suitable container	Packaging shall be in accordance to Packaging Instruction 134 of the Australian Explosives Code (AEC). Locked metal containers. Charges shall be clearly colour marked to indicate their relative strength. Check that containers are clearly labelled.
Storage incompatibility	▶ Avoid strong acids, bases.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

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INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	copper	Copper (fume) / Copper, dusts & mists (as Cu)	0.2 mg/m ³ / 1 mg/m ³	Not Available	Not Available	Not Available
Australia Exposure Standards	zinc	Fume (thermally generated) (respirable dust)(g)	2 mg/m ³	Not Available	Not Available	Not Available
Australia Exposure Standards	nitrocellulose	Fume (thermally generated) (respirable dust)(g)	2 mg/m ³	Not Available	Not Available	Not Available
Australia Exposure Standards	nitroglycerin	Nitroglycerin (NG)	0.46 mg/m ³ / 0.05 ppm	Not Available	Not Available	Sk
Australia Exposure Standards	guanyl nitrosaminoguanilyltetrazene	Fume (thermally generated) (respirable dust)(g)	2 mg/m ³	Not Available	Not Available	Not Available
Australia Exposure Standards	barium nitrate	Barium, soluble compounds (as Ba)	0.5 mg/m ³	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
copper	Copper	1 mg/m ³	1 mg/m ³	45 mg/m ³
zinc	Zinc	1.9 mg/m ³	21 mg/m ³	120 mg/m ³
nitrocellulose	Pyroxylin; (Cellulose tetranitrate)	15 mg/m ³	170 mg/m ³	990 mg/m ³
nitroglycerin	Nitroglycerin	0.1 mg/m ³	2 mg/m ³	500 mg/m ³
guanyl nitrosaminoguanilyltetrazene	Particulate material (PNOS)	30 mg/m ³	330 mg/m ³	2000 mg/m ³
barium nitrate	Barium nitrate	2.9 mg/m ³	18 mg/m ³	2100 mg/m ³

Ingredient	Original IDLH	Revised IDLH
copper	N.E. mg/m ³ / N.E. ppm	100 mg/m ³
zinc	Not Available	Not Available
nitrocellulose	Not Available	Not Available
nitroglycerin	500 mg/m ³	75 mg/m ³
lead styphnate	700 mg/m ³	100 mg/m ³
guanyl nitrosaminoguanilyltetrazene	Not Available	Not Available
barium nitrate	1,100 mg/m ³	50 mg/m ³

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure.
Personal protection	
Eye and face protection	► Safety glasses with side shields ► Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens 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

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Hands/feet protection	▶ Wear physical protective gloves, e.g. leather. ▶ Wear safety footwear.
Body protection	See Other protection below
Other protection	Overalls Hard hat Ear protection. Leather apron.
Thermal hazards	Not Available

Respiratory protection

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

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Metal small arms type cartridges for explosive powering of construction tools. Colour coded to indicate strength of charge.		
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 Available	Taste	Not Available
Evaporation rate	Not Applicable	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Applicable
Vapour pressure (kPa)	Not Applicable	Gas group	Not Available
Solubility in water (g/L)	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	▶ Presence of shock and friction ▶ Presence of open flame Product is considered stable and hazardous polymerisation will not occur.
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

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Inhaled	Not normally a hazard due to physical form of product. Inhaling 0.04-0.5 parts per million nitroglycerin may result in headache, with overexposure causing temporary loss of vision in some people. It causes dilation of the blood vessels and low blood pressure. Exposure to small amounts can result in headache, dizziness, weakness and nausea. Large exposures can result in vomiting, bluing of the extremities, convulsions, coma and possible circulatory collapse and paralysis of breathing. Prior ingestion of alcohol can worsen these effects. Repeated exposure can cause temporary tolerance to headache, which disappears rapidly; a short absence from exposure may lead to severe poisoning from amounts that were previously safe.
Ingestion	Not normally a hazard due to physical form of product. Severely toxic effects may result from the accidental ingestion of the material; animal experiments indicate that ingestion of less than 5 gram may be fatal or may produce serious damage to the health of the individual.
Skin Contact	Not normally a hazard due to physical form of product. Toxic effects may result from skin absorption There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons.
Eye	Not normally a hazard due to physical form of product. There is some evidence to suggest that this material can cause eye irritation and damage in some persons.
Chronic	Substance accumulation, in the human body, is likely and may cause some concern following repeated or long-term occupational exposure. Chronic exposure to nitro compounds of aromatic hydrocarbons have been known to cause liver and kidney damage with production of acute yellow atrophy, toxic hepatitis and fatty degeneration of the kidneys. [OHS 24320]

Powers Powerloads	TOXICITY	IRRITATION
	Not Available	Not Available
copper	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1]	Nil Reported
	Inhalation (rat) LC50: 0.733 mg/l4 h ^[1]	
	Inhalation (rat) LC50: 1.03 mg/l4 h ^[1]	
	Inhalation (rat) LC50: 1.67 mg/l4 h ^[1]	
zinc	Oral (rat) LD50: 300500 mg/kg ^[1]	
	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 1130 mg/kg ^[2]	Not Available
nitrocellulose	Oral (rat) LD50: >5000 mg/kg ^[2]	Not Available
	TOXICITY	IRRITATION
nitroglycerin	dermal (rat) LD50: >9 mg/kg ^[1]	Not Available
	Oral (rat) LD50: 105 mg/kg ^[2]	
lead styphnate	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1]	Not Available
	Inhalation (rat) LC50: >5.05 mg/l4 h ^[1]	
guanyl nitrosaminoguanilyltetrazene	Oral (rat) LD50: >2000 mg/kg ^[1]	
	TOXICITY	IRRITATION
barium nitrate	Not Available	Not Available
	TOXICITY	IRRITATION
	Oral (rat) LD50: 355 mg/kgd ^[2]	Eye (rabbit): 100 mg/24h - moderate Skin (rabbit): 500 mg/24h - mild

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

COPPER

for copper and its compounds (typically copper chloride):
Acute toxicity: There are no reliable acute oral toxicity results available. In an acute dermal toxicity study

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	(OECD TG 402), one group of 5 male rats and 5 groups of 5 female rats received doses of 1000, 1500 and 2000 mg/kg bw via dermal application for 24 hours. The LD50 values of copper monochloride were 2,000 mg/kg bw or greater for male (no deaths observed) and 1,224 mg/kg bw for female. Four females died at both 1500 and 2000 mg/kg bw, and one at 1,000 mg/kg bw. Symptom of the hardness of skin, an exudation of hardness site, the formation of scar and reddish changes were observed on application sites in all treated animals. Skin inflammation and injury were also noted. In addition, a reddish or black urine was observed in females at 2,000, 1,500 and 1,000 mg/kg bw. WARNING: Inhalation of high concentrations of copper fume may cause "metal fume fever", an acute industrial disease of short duration. Symptoms are tiredness, influenza like respiratory tract irritation with fever.
ZINC	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.
NITROGLYCERIN	The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Substance has been investigated as a tumorigen, mutagen and reproductive effector. Equivocal tumorigen by RTECS criteria. Reproductive effector in rats.
LEAD STYPHNATE	The following information refers to contact allergens as a group and may not be specific to this product. 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.
BARIUM NITRATE	The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.
NITROCELLULOSE & GUANYL NITROSAMINO GUANYLTETRAZENE	No significant acute toxicological data identified in literature search.

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 required to make classification available
 ✗ – Data available but does not fill the criteria for classification
 ⊖ – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Persistence and degradability

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

Bioaccumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients

Mobility in soil

Ingredient	Mobility
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Powers Powerloads

No Data available for all ingredients

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	▶ Consult manufacturer for recycling options and recycle where possible .
	▶ Consult State Land Waste Management Authority for disposal.
	▶ Incinerate residue at an approved site.
	▶ Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 TRANSPORT INFORMATION

Labels Required

	
Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG)

UN number	0323
Packing group	Not Applicable
UN proper shipping name	CARTRIDGES, POWER DEVICE†
Environmental hazard	No relevant data
Transport hazard class(es)	Class : 1.4S
	Subrisk : Not Applicable
Special precautions for user	Special provisions : 347
	Limited quantity : 0

Air transport (ICAO-IATA / DGR)

UN number	0323
Packing group	Not Applicable
UN proper shipping name	Cartridges, power device
Environmental hazard	No relevant data
Transport hazard class(es)	ICAO/IATA Class : 1.4S
	ICAO / IATA Subrisk : Not Applicable
	ERG Code : 3L
Special precautions for user	Special provisions : A165
	Cargo Only Packing Instructions : 134
	Cargo Only Maximum Qty / Pack : 100 kg
	Passenger and Cargo Packing Instructions : 134
	Passenger and Cargo Maximum Qty / Pack : 25 kg
	Passenger and Cargo Limited Quantity Packing Instructions : Forbidden
	Passenger and Cargo Limited Maximum Qty / Pack : Forbidden

Sea transport (IMDG-Code / GGVSee)

UN number	0323
Packing group	Not Applicable
UN proper shipping name	CARTRIDGES, POWER DEVICE

Continued...

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Environmental hazard	Not Applicable	
Transport hazard class(es)	IMDG Class	1.4S
	IMDG Subrisk	Not Applicable
Special precautions for user	EMS Number	F-B , S-X
	Special provisions	347
	Limited Quantities	0

SECTION 15 REGULATORY INFORMATION

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

COPPER(7440-50-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

ZINC(7440-66-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

NITROCELLULOSE(9004-70-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

International Air Transport Association (IATA) Dangerous Goods Regulations
- Prohibited List Passenger and Cargo Aircraft

NITROGLYCERIN(55-63-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

International Air Transport Association (IATA) Dangerous Goods Regulations
- Prohibited List Passenger and Cargo Aircraft

LEAD STYPHNATE(63918-97-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

International Agency for Research on Cancer (IARC) - Agents Classified
by the IARC MonographsInternational Air Transport Association (IATA) Dangerous Goods Regulations
- Prohibited List Passenger and Cargo Aircraft

GUANYL NITROSAMINO GUANYLTETRAZENE(109-27-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Inventory of Chemical Substances (AICS)

International Air Transport Association (IATA) Dangerous Goods Regulations
- Prohibited List Passenger and Cargo Aircraft

BARIUM NITRATE(10022-31-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

National Inventory	Status
Australia - AICS	Y
Canada - DSL	N (guanyl nitrosaminoguanyltetrazene)
Canada - NDSL	N (lead styphnate; zinc; nitrocellulose; barium nitrate; copper; nitroglycerin)
China - IECSC	N (lead styphnate; guanyl nitrosaminoguanyltetrazene; nitroglycerin)
Europe - EINEC / ELINCS / NLP	N (nitrocellulose)
Japan - ENCS	N (zinc; copper; guanyl nitrosaminoguanyltetrazene)
Korea - KECI	N (guanyl nitrosaminoguanyltetrazene)
New Zealand - NZIoC	Y
Philippines - PICCS	N (lead styphnate; guanyl nitrosaminoguanyltetrazene)
USA - TSCA	Y
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Continued...

Powers Powerloads**Other information****Ingredients with multiple cas numbers**

Name	CAS No
lead styphnate	15245-44-0, 63918-97-8, 6594-85-0
barium nitrate	10022-31-8, 34053-87-7

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.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net

The (M)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.

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