



Cartridges for Power Devices

1. Identification of the substance/preparation and the company/undertaking

1.1 Identification of the substance/preparation

Not Applicable

1.2 Use of the substance/preparation

CARTRIDGES FOR POWDER ACTUATED CARTRIDGE TOOLS

1.3 Company undertaking preparation

JCP Construction Products

Unit 14 Teddington Business Park, Station Road

Teddington, Middlesex TW11 9BQ

Tel 0208 943 1800

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1.4 Telephone number for emergencies

+44 20 8943 1800

8.30 am to 5.30pm Monday to Friday

1.5 Email for further information

jcpenquiries@owlett-jaton.com

2. Hazards identification

Target Organs Eyes, skin, respiratory system, digestive system

Routes of exposure Skin contact, eye contact, ingestion and inhalation

Signs and symptoms of short term (acute) exposure

- 2.1 **Inhalation:** After cartridges have been fired dusts, vapours and/or fumes may cause irritation to the nose, throat and upper respiratory system
- 2.2 **Skin:** Fragmented projectiles from primers can cause puncture wounds or cuts. Dust or vapours may cause moderate irritation
- 2.3 **Eyes:** Fragmented projectiles from primers can cause puncture wounds or cuts. Dust or vapours may cause moderate irritation
- 2.4 **Ingestion** Ingestion of complete cartridges or dusts may cause gastrointestinal discomfort including nausea, cramping, vomiting and diarrhoea
- 2.5 **Chronic effects** Repeated or prolonged skin exposure to dusts may result in drying, cracking and defatting of the skin (dermatitis). Prolonged or excessive exposure to dusts or fumes may cause damage to respiratory system

3. Composition/information on ingredients

Description	Cas Number	% Weight	ACGIH TLV		OSHA PEL	
			TWA	STEL	PEL	STEL
3.1 Casing						
Copper	7440-50-8	45-60%	1.0mg/m ³ (dust)	N/Av	1.0mg/m ³ (dust)	N/Av
Zinc compound	7440-66-6	20-30%	N/Av	N/Av	N/Av	N/Av
3.2 Propellant						
Nitrocellulose	9004-70-7	10-15%	N/Av	N/Av	N/Av	N/Av
Nitro-glycerine	55-63-0	5-10%	0.05ppm	N/Av	0.2ppm	N/Av
3.3 Primer Mix						
Lead styphnate	15245-44-0	0.5-1.5%	N/Av	N/Av	N/Av	N/Av
Barium nitrate	10022-31-8	0.1-1.0%	0.5mg/m ³ (asBa)	N/Av	0.5mg/m ³ (asBa)	N/Av
Tetracene			N/Av	N/Av	N/Av	N/Av

4. First Aid measures

- 4.1 **Inhalation** Ensure adequate supply of fresh air
If symptoms develop or persist seek medical treatment
- 4.2 **Skin contact** In case of contact with skin wash thoroughly with soap and water
Seek medical treatment if symptoms develop or persist or if projectile has cause injury
- 4.3 **Eye contact** Immediately flush eyes with running water for minimum of 15 minutes. Seek immediate medical advice
- 4.4 **Ingestion** Do not induce vomiting. Seek immediate medical advice

MATERIAL SAFETY DATA SHEET

Cartridges for Power Devices

5. Fire fighting measures

- 5.1 Suitable extinguishing media Foam, Dry Powder. Water Spray Jet, Carbon Dioxide
- 5.2 Unsuitable extinguishing media Water Jet
- 5.3 Special exposure hazards Unknown risk of formation of pyrolysis products
- 5.4 Special protective equipment for fire-fighters Compressed air breathing apparatus. Heat/fire exposure suits
- 5.5 Additional information Cool containers at risk with water spray
Fire residue and contaminated water must be disposed of according to local regulations

6. Accidental release measures

- 6.1 Personal protection/precautions Remove personnel to place of safety. Restrict access until clean up complete
- 6.2 Environmental precautions Do not discharge in drains/surface water/ground water
- 6.3 Method of clean up Eliminate all sources of heat, sparks and flame. Ventilate area of release.
Stop leak if possible without risk, Notify the appropriate authority

7. Handling and Storage

- 7.1 Handling Wear protective equipment during handling. Well ventilate the area. Do not inhale dusts or fumes. Avoid contact with incinerate.
- 7.2 Storage Store in original packaging in a well ventilated area away from sources of heat and ignition.
Store between 15°C (60f) and 33°C (90f)
Storage area should be clearly identified, clear of obstruction and accessible only to trained, authorised personnel
No smoking
Do not store with oxidising or self-igniting materials

8. Exposure controls/Personal protection

- 8.1 Exposure Control Use only in well ventilated area
- 8.2 Personnel protection
- Respiratory Use respiratory protection if airborne concentration exceeds exposure limits
- Ingestion Unlikely during normal use.
- Skin protection Protective gloves, impervious to the material to be worn when cleaning
- Eye Protection Wear safety glasses when in use with Cartridge Tool. Follow all Cartridge Tool guidelines
- Hygiene Do not eat smoke or drink
Wash hands before breaks and after work

9. Physical/Chemical properties

Appearance	Cylindrical Brass Cartridge
Colour	Brass
Odour	Odourless
Viscosity	N/A
Boiling Point	N/A
Flash Point	N/A
Auto-Flammability	N/A
Melting Point	Not determined
Flammability	N/A
Vapour Pressure	N/A
Partition Coefficient	N/A
Density	Not determined
pH value	N/A
Solubility in water	Not soluble
Oxidising Properties	No
Auto Ignition temperature	N/A
Decomposition temperature	N/A

10. Stability and reactivity

Hazardous reactions	N/A
Hazardous Decomposition:	None known

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11. Toxicological information

Carcinogenic status None of the ingredients are classified as carcinogenic
Reproductive effects Not expected to cause reproductive effects
Sensitization to material Not expected to be skin or respiratory sensitizer
Toxicology data There is no data for the product itself only the ingredients. See table below

Ingredient	LC ₅₀ (ppm/4hr)	inh,rat	LD ₅₀ (mg/kg)	
			oral, rat	dermal, rabbit
Copper	N/aV		N/Av	N/Av
Zinc Compound	N/aV		N/Av	N/Av
Nitrocellulose	N/aV		<5000	N/Av
Nitro-glycerine	N/aV		105	>280
Lead Styphnate	N/aV		N/Av	N/Av
Barium Nitrate	N/aV		355	N/Av
Tetracene	N/aV		N/Av	N/Av

12. Ecological information

Do not discharge into drains or the environment.
 Ecological Data not available.

13. Disposal considerations

Product Dispose of as explosive waste. Do not incinerate.
 Refer to local authority guidelines
Packaging Uncontaminated packaging can be sent for recycling

14. Transport information

Supply label: Cartridge Power Device Class 1.4S.
 U.N. number 0014
 IATA Class 1.4S
 IMDG Class 1.4S
 ADR Class 1.4S

15. Regulatory information

Labelling: Explosive 1.4S
 Notification of Local Authority is required when product is stored for resale.
 Refer to BS4078 with regard to storage and use on site.

16. Other information

- R-Phrases**
- R2 Risk of explosion by shock, friction, fire or other sources of ignition
 - R3 Extreme risk of explosion by shock, friction, fire or other sources of ignition
 - R15 Contact with water liberates extremely flammable gases
 - R17 Spontaneously flammable in air
 - R20/22 Harmful by inhalation and if swallowed
 - R33 Danger of cumulative effects
 - R50/51/53 Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
 - R61 May cause harm to the unborn child
 - R62 Possible risk of impaired fertility

The above information has been compiled from that provided by our suppliers and other sources. None of the original information relating to hazards or potential hazards has been omitted and so the absence of a particular reference merely implies either that such information has not been determined or that it is not applicable. Should amendments become necessary, these will be published in future issues.
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