

MATERIAL SAFETY DATA SHEET



POWER CARTRIDGE MAGNUM BUSTER

Material Safety Data Sheet

This product should be stored, handled and used in accordance with good industrial and personal hygiene practices and in conformity with any legal regulation. The information contained herein is based on the present state of knowledge and is intended to describe the product from the point of view of Safety Requirements. It should therefore not be construed as guaranteeing specific product performance properties.

MANUFACTURER

Name: McCarthy Industries
 Address: 500 Haggin View Rd
 Ramsay, MT 59748

Tel No: (713) 575 5002
 Email: info@mccarthyindustries.com

Contact: Don McCarthy

NAME OF SUBSTANCE	Cartridges	Power Device	
CHEMICAL FORMULA	Not Applicable	Final Product	
Domestic Shipping	Exemption	ORM-D	
Export Shipping: UN Description.	Cartridges, Power Device	UN Number 0323	CLASS 1.4S

PHYSICAL PROPERTIES (Nominal for Power Cartridge)		OTHER CHARACTERISTICS
Auto-ignition Temperature:	>150 deg C	A plastic cartridge containing a primer for ignition and a nitrocellulose propellant (ball powder) for gas production. The configuration is unique and cannot be fitted or used in a standard weapon.
Net Explosive Mass:	10 g (maximum)	
<i>Small D x L</i>	15 g (maximum)	
<i>Medium D x L</i>	30 g (maximum)	
Gross Mass w/Cartridge Body:	31 g	The cartridge is used to produce a rapid evolution of gas, which provides the energy necessary to break rock in the mining industry. The energy is converted into a hydrostatic pulse by directing the gas into a water filled hole within the rock.
<i>Small D x L</i>	39 g	
<i>Medium D x L</i>	58 g	
<i>Large D x L</i>		
Approximate Dimensions:	25 mm x 75 mm	
<i>Small D x L</i>	25 mm x 90 mm	
<i>Medium D x L</i>	25 mm x 120mm	
<i>Large D x L</i>		

HAZARDS / SYMPTOMS	PREVENTION	FIRE EXTINGUISHING AGENTS AND FIRST AID
<p>Fire</p> <p>Will not explode en masse. Exposure to flame will destroy packaging and may result in the ignition of cartridges.</p> <p>Explosion</p> <p>An explosion risk exists only when cartridges are tightly confined in a closed vessel or similar. A pressure build-up may cause an explosion and a scattering of the confined material.</p> <p>Inhalation</p> <p>Periodic inhalation of normal combustion products presents no hazard to the user. Typical mass decomposition products include Pb, CO, CO₂, H₂O, H₂, NO_x, and N₂.</p> <p>Hearing</p> <p>Permanent damage to hearing may result from frequent exposure to impact noise without wearing suitable hearing protection.</p>	<p>Store and transport away from radiant heat and open flames. Maintain a distance of at least 8m should any packaging catch alight.</p> <p>Use cartridges only as specified by the manufacturer. Limit quantity stored to a minimum. Ensure that cartridges are not subject to impact, friction, electrostatic or electric sources, heat.</p> <p>Do not use in confined spaces. Ensure good ventilation during use. NO_x and other gases are present in hazardous quantities when cartridges are burnt in mass.</p> <p>Hearing protection which provides at least 50dB(A) attenuation should be worn, or use should be made of the percussion valve type ear muff.</p>	<p>Douse fire with water, dry powder, carbon dioxide, or foam. Wear SCBA when large quantities of cartridges are burning.</p> <p>Douse fire with water, dry powder, carbon dioxide, or foam. Punctures and lacerations caused by flying projectiles may be treated in the normal manner.</p> <p>If a headache develops as a result of inhalation of combustion products, remove to fresh air. Ensure that work area has been sufficiently ventilated before resuming work.</p> <p>Persons exposed to percussion on a frequent and regular basis should be subjected to an annual audiometric examination. Chronic hearing loss may be untreatable.</p>

SPILLAGE and DISPOSAL PRECAUTIONS	STORAGE REQUIREMENTS
<p>Design of the product makes spillage of large amounts of propellant unlikely. Propellant powder which has been spilled must be soaked in water for a minimum of one hour and then thrown directly onto a fire. Observe the following precautions when carrying out this action;</p> <ol style="list-style-type: none"> 1. Move at least 5m away from the fire immediately after the wet propellant has been thrown onto the flames. 2. Never throw dry propellant powder onto a fire, as this may result in injury. <p>Empty Magnum Cartridges may be disposed of one at a time by throwing them into an enclosed fire which protects the operator from flying debris. A sharp report will signal the successful disposal of the initiator.</p>	<p>Store in a dry place with temperature and humidity preferably between 41-95°F (5-35°C) (ideally 68°F/20°C) and less than 50% Relative Humidity.</p>

PACKING AND LABELLING
<p><u>Cartridges, Power Device</u></p> <p>Domestic: ORM-D, One hundred cartridges are packed in a cardboard box. Cardboard box is marked ORM-D Cartridges, Power Device</p> <p>International: U. N. 0323, Group 1.4S. Maximum, One hundred cartridges are packed in a cardboard box. Cardboard box is marked Power Cartridge, Magnum Buster. Also included will be actual Size Class, Gross Weight and Net Explosive Weight.</p>

MEDICAL TREATMENT	REFERENCES RELATED TO INFORMATION
<p>Injury arising from accidental discharge of the Magnum Buster cartridge should be treated according to nature and severity. Treat all persons who have inhaled large quantities of ignition products as stretcher cases. Ensure that patients who have inhaled large quantities of ignition gases are observed for 24 hours (effect of Nitrous oxides).</p>	<p>Occupational Health & Safety Act No 85 of 1993 General Administrative Regulations of Act 85 of 1993</p> <p>UN Publication 'Recommendations on the Transport of Dangerous Goods'.</p>

GENERAL OPERATING PRECAUTIONS

CONSULT USER MANUAL FOR DETAILED OPERATING INSTRUCTIONS.

GENERAL SAFETY PRECAUTIONS

1. KEEP ALL CARTRIDGES AWAY FROM CHILDREN.
2. DO NOT USE CARTRIDGES IN AN ENVIRONMENT CONTAINING FLAMABLE GASES.
3. DO NOT INITIATE A CARTRIDGE IN IMMEDIATE CONTACT WITH COMBUSTABLE MATERIALS.
4. DO NOT ATTEMPT TO PUNCTURE, DISSASSEMBLE OR MODIFY ANY CARTRIDGE.
5. DO NOT HEAT CARTRIDGE OR DISPOSE OF IN OPEN FIRE.
6. APPLY SAFETY PRACTICES APPLICABLE TO THE HANDLING POWER CARTRIDGES.
7. DO NOT ALLOW UNTRAINED PERSONS TO HANDLE THIS PRODUCT.