

MSDS Control Group Olin Brass and Winchester, Inc.  
East Alton, IL 62024-1273

Date printed 02.08.2013, Revision 02.08.2013

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## SECTION 1: Identification of the substance / preparation and of the company

### 1.1 Product identifier

**CARTRIDGES FOR POWER DEVICES**

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

#### 1.2.1 Relevant uses

Cartridges for tools

#### 1.2.2 Uses advised against

None known.

### 1.3 Details of the supplier of the safety data sheet

#### Company

MSDS Control Group Olin Brass and Winchester, Inc.

600 Powder Mill Road  
East Alton, IL 62024-1273 / USA  
Phone +1 618-258-3534  
Fax +1 618-258-3393  
Homepage [www.winchester.com](http://www.winchester.com)  
E-mail [8gauge@olin.com](mailto:8gauge@olin.com)

#### Address enquiries to

#### Technical information

[8gauge@olin.com](mailto:8gauge@olin.com)

#### Safety Data Sheet

[sdb@chemiebuero.de](mailto:sdb@chemiebuero.de)

### 1.4 Emergency phone

#### Company

+1 618-258-3534 Mo-Fr 8:00 - 16:00

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### 2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

see SECTION 16

#### 2.1.2 Classification according to Regulation 67/548/EEC or 1999/45/EC

No classification.

### 2.2 Label elements

This product is an article and therefore it does not require labelling according to EC directives/GefStoffV.

### 2.3 Other hazards

#### Physico-chemical hazards

This articles can be ignited by heat, sparks, flames or other sources of ignition (E.g. ignition flame, static electricity, mechanical/electrical equipment).

#### Human health dangers

The contained dangerous materials are not freely available with foreseeable use.

#### Environmental hazards

The contained dangerous materials are not freely available with foreseeable use.

#### Other hazards

Disassembly of articles is prohibited.

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### SECTION 3: Composition / Information on ingredients

#### 3.1 Product-type:

The product is an article.

Range [%]	Substance
50 - 65	Copper CAS: 7440-50-8, EINECS/ELINCS: 231-159-6
15 - 32	Zinc powder - zinc dust (pyrophoric) CAS: 7440-66-6, EINECS/ELINCS: 231-175-3 GHS/CLP: Water-react. 1: H260 - Pyr. Sol. 1: H250 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410 EEC: F-N, R 15-17-50/53
7 - 13	Nitrocellulose CAS: 9004-70-0, EINECS/ELINCS: Polymer EEC: E, R 2
0,5 - 2	Glycerol trinitrate CAS: 55-63-0, EINECS/ELINCS: 200-240-8, EU-INDEX: 603-034-00-x GHS/CLP: Acute Tox. 2: H300 H310 H330 - STOT RE 2: H373 - Aquatic Chronic 2: H411 - Unst. Expl.: H200 EEC: E-T+-N, R 3-26/27/28-33-51/53
0,5 - 1	Lead 2,4,6-trinitro-m-phenylene dioxide CAS: 15245-44-0, EINECS/ELINCS: 239-290-0, EU-INDEX: 609-019-00-4 GHS/CLP: Unst. Expl.: H200 - Repr. 1A: H360Df - Acute Tox. 4: H302 H332 - STOT RE 2: H373 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410 EEC: E-T-N, R 3-20/22-33-50/53-61-62

#### Comment on component parts

SVHC (Candidate List of Substances of Very High Concern for authorisation)  $\geq$  0,1%  
 CAS 15245-44-0 - Lead 2,4,6-trinitro-m-phenylene dioxide  
 For full text of H-statements and R-phrases: see SECTION 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General information

First aid is required only when the leakage of ingredients or emergence of decomposition products.  
 Change soaked clothing immediately.  
 Adhere to personal protective measures when giving first aid.

##### Inhalation

After inhalation of decomposition products:  
 Remove the victim into fresh air and keep him calm.  
 In the event of symptoms seek for medical treatment.

##### Skin contact

In case of contact with skin wash off immediately with soap and water.  
 In the event of symptoms seek for medical treatment.

##### Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 If eye irritation persists: Get medical advice/attention.

##### Ingestion

Consult a doctor immediately.  
 Do not induce vomiting.  
 Rinse out mouth and give plenty of water to drink.

#### 4.2 Most important symptoms and effects, both acute and delayed

No information available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.  
 Forward this sheet to the doctor.

### SECTION 5: Fire-fighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

foam, dry powder, water spray jet, carbon dioxide  
 Fire-fighting procedures from a safe distance.

##### Extinguishing media that must not be used

Full water jet

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## 5.2 Special hazards arising from the substance or mixture

Bursting Cartridges can be forcibly projected from a fire.  
Unknown risk of formation of toxic pyrolysis products.  
Carbon monoxide (CO)  
Nitrogen oxides (NOx).  
Metal oxides.

## 5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.  
Use self-contained breathing apparatus.  
Wear full protective suit.  
Cool containers at risk with water spray jet.  
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.  
Collect contaminated firefighting water separately, must not be discharged into the drains.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Remove persons to safety.  
Some risk of slipping due to spillage of product.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

### 6.3 Methods and material for containment and cleaning up

Take up mechanically.  
Flush away residues with water.  
Dispose of absorbed material in accordance within the regulations.

### 6.4 Reference to other sections

See SECTION 8+13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

No special measures necessary if used correctly.  
Use only in well-ventilated areas.  
The article is explosive.  
Keep away from all sources of ignition - Refrain from smoking.  
Handle with care - avoid shock, friction, impact.  
Wear anti-static shoes and work clothes.  
Take precautionary measures against static discharges.  
Do not eat, drink, smoke or take drugs at work.  
Wash hands before breaks and after work.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.  
Do not store together with oxidizing agents.  
Do not store with combustible materials.  
Keep in a well-ventilated place.  
Protect from heat/overheating.  
Keep under lock and key. Should only be accessible to specialists or people authorized by them.

### 7.3 Specific end use(s)

See product information.

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## SECTION 8: Exposure controls / personal protection

### 8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Range [%]	Substance
50 - 65	Copper
	CAS: 7440-50-8, EINECS/ELINCS: 231-159-6
	Long-term exposure: 1 mg/m <sup>3</sup> , dusts and mists (as Cu), 0,2mg/m <sup>3</sup> * (fume)
	Short-term exposure (15-minute): 2 mg/m <sup>3</sup>
0,5 - 2	Glycerol trinitrate
	CAS: 55-63-0, EINECS/ELINCS: 200-240-8, EU-INDEX: 603-034-00-x
	Long-term exposure: 0,2 ppm, 1,9 mg/m <sup>3</sup>
	Short-term exposure (15-minute): 0,2 ppm, 1,9 mg/m <sup>3</sup>

### 8.2 Exposure controls

<b>Additional advice on system design</b>	Ensure adequate ventilation on workstation.
<b>Eye protection</b>	safety glasses
<b>Hand protection</b>	Not required under normal conditions. Leather gloves.
<b>Skin protection</b>	Flame retardant antistatic protective clothing. Hearing protectors
<b>Other</b>	not applicable
<b>Respiratory protection</b>	Not required under normal conditions.
<b>Thermal hazards</b>	not applicable
<b>Delimitation and monitoring of the environmental exposition</b>	See SECTION 6+7.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Form</b>	Cylindrical brass cartridge
<b>Color</b>	not determined
<b>Odor</b>	not applicable
<b>Odour threshold</b>	not applicable
<b>pH-value</b>	not applicable
<b>pH-value [1%]</b>	not applicable
<b>Boiling point [°C]</b>	not applicable
<b>Flash point [°C]</b>	not applicable
<b>Flammability [°C]</b>	not applicable
<b>Lower explosion limit</b>	not applicable
<b>Upper explosion limit</b>	not applicable
<b>Oxidizing properties</b>	no
<b>Vapour pressure/gas pressure [kPa]</b>	not applicable
<b>Density [g/ml]</b>	not determined
<b>Bulk density [kg/m<sup>3</sup>]</b>	not applicable
<b>Solubility in water</b>	insoluble
<b>Partition coefficient [n-octanol/water]</b>	not applicable
<b>Viscosity</b>	not applicable
<b>Relative vapour density determined in air</b>	not applicable
<b>Evaporation speed</b>	not applicable
<b>Melting point [°C]</b>	not applicable
<b>Autoignition temperature [°C]</b>	not applicable
<b>Decomposition temperature</b>	not applicable

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## 9.2 Other information

none

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

See SECTION 10.3.

### 10.2 Chemical stability

The product is stable under standard conditions.

### 10.3 Possibility of hazardous reactions

Heating may cause an explosion.

Shock / pressure: Risk of explosion

### 10.4 Conditions to avoid

Strong heating.

Avoid bumps, friction and impact.

### 10.5 Incompatible materials

Reactions with strong acids and alkalies.

### 10.6 Hazardous decomposition products

In the event of fire: See SECTION 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Range [%]	Substance
50 - 65	Copper, CAS: 7440-50-8
	LD50, oral, mouse: 0,7 mg/kg (IUCLID).
0,5 - 2	Glycerol trinitrate, CAS: 55-63-0
	LD50, oral, Rat: 105 mg/kg (IUCLID).
	LD50, dermal, Rabbit: > 280 mg/kg (IUCLID).

**Serious eye damage/irritation** not determined

**Skin corrosion/irritation** not determined

**Respiratory or skin sensitisation** not determined

**Specific target organ toxicity — single exposure** not determined

**Specific target organ toxicity — repeated exposure** not determined

**Mutagenicity** not determined

**Reproduction toxicity** not determined

**Carcinogenicity** not determined

#### General remarks

The contained ingredients can be harmful to humans, but are hermetically enclosed in article and can not be released.  
Disassembly of article is prohibited.

Toxicological data of complete product are not available.

The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

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## SECTION 12: Ecological information

### 12.1 Toxicity

Range [%]	Substance
50 - 65	Copper, CAS: 7440-50-8
	LC50, (48h), Gambusia affinis: 0,18 mg/L (IUCLID).
0,5 - 2	Glycerol trinitrate, CAS: 55-63-0
	EC50, (48h), Daphnia magna: 46 - 55 mg/l (IUCLID).
	LC50, (96h), Lepomis macrochirus: 1,38 mg/l (IUCLID).
15 - 32	Zinc powder - zinc dust (pyrophoric), CAS: 7440-66-6
	LC50, (96h), fish: 2,01 mg/L (GESTIS).
	EC50, (72h), Algae: 0,713 mg/L (GESTIS).
	EC50, (48h), Crustacea: 1,33 mg/L (GESTIS).

### 12.2 Persistence and degradability

<b>Behaviour in environment compartments</b>	not determined
<b>Behaviour in sewage plant</b>	not determined
<b>Biological degradability</b>	not determined

### 12.3 Bioaccumulative potential

not determined

### 12.4 Mobility in soil

not determined

### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

### 12.6 Other adverse effects

Ecological data of complete product are not available.

The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

The contained ingredients can be harmful for the environment, but they are hermetically enclosed in article and can not be released.

Disassembly of article is prohibited.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

#### Product

Coordinate disposal with the disposal contractor/authorities if necessary.

#### Waste no. (recommended)

160401\* waste ammunition

#### Contaminated packaging

Uncontaminated packaging may be taken for recycling.

#### Waste no. (recommended)

150101

## SECTION 14: Transport information

### 14.1 UN number

See SECTION 14.2 in accordance with UN shipping name





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#### 14.2 UN proper shipping name

<b>Transport by land according to ADR/RID</b>	UN 0014 Cartridges for tools, blank 1.4
- Classification Code	1.4S
- Label	
- ADR LQ	5 kg
- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 4 (E)
<b>Inland navigation (ADN)</b>	UN 0014 Cartridges for tools, blank 1.4
- Classification Code	1.4S
- Label	
<b>Marine transport in accordance with IMDG</b>	UN 0014 Cartridges for tools, blank 1.4 S -
- EMS	F-B, S-X
- Label	
- IMDG LQ	5kg
<b>Air transport in accordance with IATA</b>	UN 0014 Cartridges for tools, blank 1.4S
- Label	

#### 14.3 Transport hazard class(es)

See SECTION 14.2 in accordance with UN shipping name

#### 14.4 Packing group

See SECTION 14.2 in accordance with UN shipping name

#### 14.5 Environmental hazards

See SECTION 14.2 in accordance with UN shipping name

#### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

#### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information available.

### SECTION 15: Regulatory information

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

<b>EEC-REGULATIONS</b>	1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC
<b>TRANSPORT-REGULATIONS</b>	DOT-Classification, ADR (2013); IMDG-Code (2013, 36. Amdt.); IATA-DGR (2013).
<b>NATIONAL REGULATIONS (GB):</b>	EH40/2005 Workplace exposure limits (Second edition, published December 2011). CHIP 3/ CHIP 4
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (1999/13/CE)	0 %

#### 15.2 Chemical safety assessment

not applicable

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## SECTION 16: Other information

### 16.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms



Signal word

WARNING

Expl. 1.4: H204 Fire or projection hazard.

### 16.2 R-phrases (SECTION 3)

R 2: Risk of explosion by shock, friction, fire or other sources of ignition.  
R 3: Extreme risk of explosion by shock, friction, fire or other sources of ignition.  
R 26/27/28: Very toxic by inhalation, in contact with skin and if swallowed.  
R 33: Danger of cumulative effects.  
R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R 20/22: Harmful by inhalation and if swallowed.  
R 50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R 61: May cause harm to the unborn child.  
R 62: Possible risk of impaired fertility.  
R 15: Contact with water liberates extremely flammable gases.  
R 17: Spontaneously flammable in air.

### 16.3 Hazard statements (SECTION 3)

H250 Catches fire spontaneously if exposed to air.  
H260 In contact with water releases flammable gases which may ignite spontaneously.  
H410 Very toxic to aquatic life with long lasting effects.  
H400 Very toxic to aquatic life.  
H302+H332 Harmful if swallowed or if inhaled.  
H360Df May damage the unborn child. Suspected of damaging fertility.  
H200 Unstable explosives.  
H411 Toxic to aquatic life with long lasting effects.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H300+H310+H330 Fatal if swallowed, in contact with skin or if inhaled.

### 16.4 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
CAS = Chemical Abstracts Service  
CLP = Classification, Labelling and Packaging  
DMEL = Derived Minimum Effect Level  
DNEL = Derived No Effect Level  
EC50 = Median effective concentration  
ECB = European Chemicals Bureau  
EEC = European Economic Community  
EINECS = European Inventory of Existing Commercial Chemical Substances  
ELINCS = European List of Notified Chemical Substances  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
IC50 = Inhibition concentration, 50%  
IMDG = International Maritime Code for Dangerous Goods  
IUCLID = International Uniform Chemical Information Database  
LC50 = Lethal concentration, 50%  
LD50 = Median lethal dose  
MARPOL = International Convention for the Prevention of Marine Pollution from Ships  
PBT = Persistent, Bioaccumulative and Toxic substance  
PNEC = Predicted No-Effect Concentration  
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals  
TLV@/TWA = Threshold limit value – time-weighted average  
TLV@STEL = Threshold limit value – short-time exposure limit  
VOC = Volatile Organic Compounds  
vPvB = very Persistent and very Bioaccumulative

### 16.5 Other information

Customs Tariff

not determined



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**Modified position**

none

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