

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS, Australian WorkSafe, Japanese Standard JIS Z 7250:2000, and EU REACH Regulations

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** **BULLETS , JACKETED LEAD-CORE**  
**CAS Number:** Mixture – Metal Alloy  
**Synonyms:** Soft Point Bullets, Full Metal Jacket Bullets, Power Point Bullets, Jacketed Hollow Point Bullets  
**Product Use:** Projectile  
**U.N. Number:** None  
**U.N. Dangerous Goods Class** Not regulated  
**Manufacturer:** Olin Corporation – Winchester Division, Inc.  
**Manufacturers' Address:** 600 Powder Mill Road, East Alton, IL 62024 [www.winchester.com](http://www.winchester.com)  
**Emergency Telephone Number:** US/Canada: 1-800-424-9300  
Outside US/Canada: 703-527-3887  
**SDS Control Group:** 618-258-3507 (Technical Information Only)

Olin SDS No.: 00089.0001

Issue Date: 02/20/2015

Revision Date: 01/31/2017

Revision No.: 02

## 2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: PARTICLES FROM FIRING MAY BE HARMFUL IF INHALED. DO NOT TAKE INTERNALLY.

US DOT SYMBOLS

Not Regulated

CANADA (WHMIS) SYMBOLS

This Product is not subject to WHMIS

GHS HAZARD SYMBOLS





|   |  |
|---|--|
| <b><u>GHS Classifications:</u></b>      | STOT RE Category 2<br>Reproductive Toxicity Category 2<br>Aquatic Environment, Chronic II  |
| <b><u>Signal Word:</u></b>              | Warning  |
| <b><u>Hazard Statements:</u></b>        | H373: May cause damage to nervous system, kidney, and hematopoietic system through prolonged or repeated exposure<br>H361: Suspected of damaging fertility or the unborn child<br>H411: Toxic to aquatic life with long lasting effects  |
| <b><u>Target organs:</u></b>            | Nervous, renal and hematopoietic systems   |
| <b><u>Precautionary Statements:</u></b> | P102: Keep out of reach of children<br>P260: Do not breathe dust/fume/gas/mist/vapors/spray<br>P264: Wash hands thoroughly after handling<br>P270: Do not eat, drink or smoke when using this product<br>P271: Use only outdoors or in a well-ventilated area<br>P273: Avoid release to the environment<br>P280: Wear protective gloves/protective clothing/eye protection/face protection |
| <b><u>GHS Pictograms:</u></b>           | Specific Target Organ Toxicity; Pictogram Code: GHS08<br>Environment; Pictogram Code: GHS09  |
| <b><u>EU Classifications:</u></b>       |  |
| Hazard Symbols                          | Xn, N  |
| Risk Phrases                            | R48: Danger of serious damage to health by prolonged exposure<br>R62/63 : Possible risk of impaired fertility or harm to the unborn child<br>R51/53: Toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment   |
| Safety Phrases                          | S2: Keep out of reach of children<br>S20/21: When using do not eat, drink or smoke<br>S22: Do not breathe dust<br>S39: Wear eye/face protection<br>S51: Use only in well-ventilated areas<br>S61: Avoid release to the environment   |

### Health Hazards or Risks From Exposure

This product is composed of a finished metal alloy bullet. Therefore, under normal handling of this product, no exposure to any harmful materials are likely to occur. When the bullet is fired, a small amount of particles may be generated which may be slightly irritating to the eyes and the respiratory tract. The particles may contain trace amounts of these harmful substances:

Lead: Ingestion of large amounts of lead can cause abdominal pain, constipation, cramps, nausea and/or vomiting. Chronic exposure to lead can cause kidney damage, anemia, reproductive effects, developmental effects and permanent nervous system damage in humans including changes in cognitive function.

Copper: Inhalation of high concentrations of metallic copper dusts or fumes may cause nasal irritation and/or nausea, vomiting and stomach pain.

It is unlikely that the amount of particles that someone would be exposed to from firing these bullets would be sufficient to cause any of these effects.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Components        | % By Weight | CAS Number | EINECS/ ELINCS # |
|-------------------|-------------|------------|------------------|
| Lead              | 60 - 100    | 7439-92-1  | 231-100-4        |
| Copper/Zinc Alloy | 10 – 35     | Mixture    | Mixture          |

### 4. FIRST AID MEASURES

Eye Contact: Immediately flush out fume or particles with large amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If eye irritation develops, call a physician at once.

Skin Contact: Wash skin with plenty of soap and water.

Inhalation: If symptoms of lung irritation occur (coughing, wheezing or breathing difficulty), remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial respiration. Keep affected person warm and at rest. Get medical attention.

Ingestion: If ingested, immediately call a physician.

#### Medical Conditions Aggravated By Exposure:

There are no medical conditions known to be aggravated by exposure to this product in its solid form. Exposure to lead can aggravate anemia, cardiovascular and respiratory disease.

#### Recommendations To Physicians:

Remove from exposure, if possible, and treat symptoms

### 5. FIRE FIGHTING MEASURES

| PROPERTY               | VALUE          | PROPERTY   | VALUE          |
|------------------------|----------------|--|----------------|
| Explosive              | No             | Flammable  | No             |
| Combustible            | Not applicable | Pyrophoric   | No             |
| Flash Point (°C):      | Not applicable | Burning Rate of Material:                                  | Not applicable |
| Lower Explosive Limit: | Not applicable | Autoignition Temp.:  | Not applicable |
| Upper Explosive Limit: | Not applicable | Flammability Classification: (defined by 29 CFR 1910.1200) | Not applicable |

#### Unusual Fire and Explosion Hazards:

None

#### Extinguishing Media:

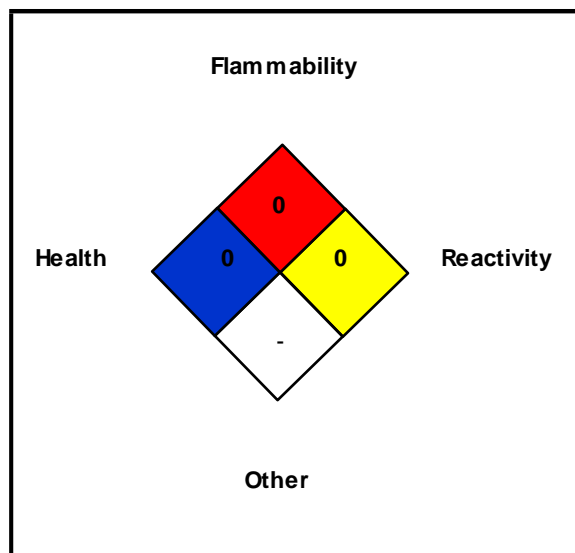
Not Applicable - Choose extinguishing media suitable for surrounding materials.

#### Special Firefighting Procedures:


In case of fire, use normal fire fighting equipment. Response to this material requires the use of a self-contained breathing apparatus (SCBA).

Prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas, if practical.

### NFPA RATING SYSTEM



### HMIS RATING SYSTEM

|   |          |                       |
|---|----------|-----------------------|
| HEALTH HAZARD (BLUE)  |          | 0*                    |
| FLAMMABILITY HAZARD (RED)   |          | 0                     |
| PHYSICAL HAZARD (YELLOW)  |          | 0                     |
| <b>PROTECTIVE EQUIPMENT</b>   |          |                       |
| EYES  | PPE CODE | RESPIRATORY HEARING   |
|  | A        | See Sect 8 See Sect 8 |

**Hazard Scale:** 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

## 6. ACCIDENTAL RELEASE MEASURES

**FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC AT 800-424-9300.**

#### Spill Response:

A spill of this material will normally not require emergency response team capabilities. This material is heavier than and insoluble in water. Use clean shovel or broom to pick up and place in clean container for disposal. If, however, a large spill occurs, call 1-888-289-1911 for technical assistance.

#### Accidental Release Procedures:

Place collected material in a designated, labeled waste container. See Section 13 for waste disposal.

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling:

Use appropriate personal protective equipment (see Section 8). Workers should wash hands thoroughly after handling. Eating, drinking and smoking should be prohibited in areas where this material is handled and stored.

### Conditions for Safe Storage:

Store in original containers in a cool, dry location away from acids and caustics.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters:

| CAS #     | CHEMICAL NAME | ACGIH TLV   | OSHA PEL  | INTERNATIONAL OELS   |
|-----------|---------------|---|---|--|
| 7439-92-1 | Lead          | 0.05 mg/m <sup>3</sup>  | 0.05 mg/m <sup>3</sup>  | Austria, Denmark, Germany, Sweden, Switzerland: 0.1 mg/m <sup>3</sup><br>Norway, Poland: 0.05 mg/m <sup>3</sup>  |
| 7440-50-8 | Copper        | 0.2 mg/m <sup>3</sup> (fume), 1 mg/m <sup>3</sup> (dusts and mists) | 0.1 mg/m <sup>3</sup> (fume)<br>1 mg/m <sup>3</sup> (dusts and mists) | Austria, Belgium, Canada: 0.2 mg/m <sup>3</sup> (fumes), 1 mg/m <sup>3</sup> (dusts)<br>Denmark: 1.0 mg/m <sup>3</sup> (dust and powder)<br>Germany (MAK): 0.1 mg/m <sup>3</sup> (fume), 1 mg/m <sup>3</sup> (dusts and mists) |
| 7440-66-6 | Zinc          | None established  | None established  | None established   |

### Engineering Controls:

Local exhaust ventilation is recommended if significant dusting occurs or fumes are generated. Otherwise, use general exhaust ventilation.

### Respiratory Protection:

Not normally needed. Maintain airborne contaminant concentrations below guidelines listed above. Use an appropriate approved air-purifying respirator equipped with HEPA cartridges/canisters where there is the potential for exceeding established occupational exposure limits.

### Eye/Face Protection:

Use safety glasses.

### Hand Protection:

Not normally needed

### Skin Protection:

Not normally needed.

### Hearing Protection:

Not normally needed. During firing use hearing protection.

### General Hygiene:

Do not eat, drink, or smoke while using this product. Wash hands thoroughly after use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| PROPERTY                             | VALUE  | PROPERTY                                    | VALUE          |
|--------------------------------------|--|---|----------------|
| <i>Appearance:</i>                   | Cylindrical projectile – copper colored if copper alloy plated, gray if not plated | <i>Physical State:</i>                      | Solid          |
| <i>Odor:</i>                         | None   | <i>Odor Threshold:</i>                      | None           |
| <i>Boiling Point (°F):</i>           | Not applicable   | <i>Melting point:</i>                       | Not applicable |
| <i>Vapor Pressure (mm Hg):</i>       | Not applicable   | <i>Freezing point:</i>                      | Not applicable |
| <i>Vapor Density (air = 1):</i>      | Not applicable   | <i>Bulk Density:</i>                        | Not applicable |
| <i>Specific gravity (g/cc):</i>      | Not applicable   | <i>Viscosity (cps):</i>                     | Not applicable |
| <i>pH:</i>                           | Not applicable   | <i>Decomposition Temperature:</i>           | Not applicable |
| <i>Solubility in Water (20 °C):</i>  | Insoluble  | <i>Evaporation Rate:</i>                    | Not applicable |
| <i>Volatiles, Percent by volume:</i> | Not applicable   | <i>Octanol/water partition coefficient:</i> | Not applicable |

## 10. STABILITY AND REACTIVITY

### Stability:

Stable under normal temperatures and pressure.

### Possibility of Hazardous Reactions:

Hazardous polymerization will not occur

### Incompatible Materials:

Acids and caustics

### Hazardous Decomposition Products:

Metals may liberate hydrogen gas from reaction with acids. Metal oxides, lead dust/fume

### Conditions to Avoid:

Contact with incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

Potential Routes of Entry: Inhalation, Skin, and by Ingestion.

The physical nature of this product makes absorption from any route unlikely. A small amount of inhalable particles may be created when cartridge is fired.

Effects Of Acute Exposure:

| PRODUCT                          |  | SELECTED COMPONENTS |                        |              |
|----------------------------------|--|---------------------|------------------------|--------------|
|                                  |  | Lead                | Copper                 | Zinc         |
| Inhalation<br>LC <sub>50</sub>   | Particles generated from firing may be slightly toxic                  | No data             | No data                | No data      |
| Skin Contact<br>LD <sub>50</sub> | Skin absorption unlikely   | No data             | 375 mg/kg, sc (rabbit) | No data      |
| Ingestion<br>LD <sub>50</sub>    | Ingestion unlikely   | No data             | 3.5 mg/kg, ip (mouse)  | No data      |
| Irritation                       | Particles generated from firing may be slightly irritating to the eyes | Not irritating      | Respiratory irritant   | Eye irritant |
| Sensitization                    | Sensitization to this Product has not been reported                    | No data             | No data                | No data      |

Other Adverse Effects:

Target Organ Toxicity:

No reported target organ toxicity from this product. Lead has caused nervous system, kidney and hematopoietic system damage in humans and laboratory animals.

Reproductive Toxicity:

This product is not known or reported to cause reproductive effects. Lead has been shown to reduce male reproductive function in humans and laboratory animals.

Teratogenicity (Birth Defects):

This product is not known or reported to cause developmental toxicity. Lead has been shown to affect fetal development; changes including birth defects have been reported.

Mutagenicity:

This product is not known or reported to be mutagenic. Lead has been shown to be mutagenic in several *in vitro* assays.

Carcinogenicity:

This product is not listed as a carcinogen by OSHA, NTP or IARC. IARC lists lead as possibly carcinogenic to humans, group 2B.

## 12. ECOLOGICAL INFORMATION

Environmental Effects:

**PRODUCT:** Product has not been tested for environmental properties. Lead shot has been shown to be toxic to aquatic species.

**COMPONENTS:**

Copper:

Copper concentrations from 0.1 to 1.0 mg/l have been found to be not toxic for most fish. However, concentrations of 0.015 to 3.0 mg/l have been reported as toxic, particularly in soft water to many kinds of fish, crustacea, mollusks, insects, and plankton.

Lead:

Bluegill sunfish, 48 hr. LC<sub>50</sub> = 2-5 mg/l. Lead is toxic to waterfowl.

Zinc: The following concentrations of zinc have been reported as lethal to fish: 0.13 mg/l, for 12 – 24 hours to Rainbow trout fingerlings; 1.9 – 3.6 mg/l, 6 hr TLM (soft water, 30°C) to Bluegill Sunfish; 4 mg/l, 3 days (hard water) to Rainbow trout; 1 mg/l, 24 hours (soft water) to Sticklebacks.  
The presence of copper appears to have a synergistic effect on the toxicity of zinc towards fish.

Environmental Fate:

MOBILITY: Dissolved lead from degraded bullets may migrate through soil.  
PERSISTENCE/DEGRADABILITY: Not biodegradable. Bullets may fragment and decompose in soil leading to accumulation of lead.  
BIOACCUMULATION: No data

**13. DISPOSAL CONSIDERATIONS**

Care must be taken to prevent environmental contamination from the use of this material. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding the treatment, storage and disposal for hazardous and nonhazardous wastes.

**14. TRANSPORT INFORMATION**Regulatory Information for US DOT, IATA, IMO, and ADR:

This product is not regulated

Proper Shipping Name: None  
Hazard Class Number and Description: None  
UN Identification Number: None  
Packing Group: None  
DOT Label(s) Required: None  
Marine Pollutant: No information

**15. REGULATORY INFORMATION**US FEDERAL

|                    |   |                             |                 |                         |                                |
|--------------------|---|-----------------------------|-----------------|-------------------------|--------------------------------|
| TSCA               | The components of this product are listed on the Toxic Substance Control Act inventory.   |                             |                 |                         |                                |
| CERCLA:            | Lead, R.Q. = 10 lbs. (No reporting is required if diameter of the pieces of metal is equal to or exceeds 100 micrometers (0.004 inches)). |                             |                 |                         |                                |
| SARA 313:          | Lead and Lead compounds   |                             |                 |                         |                                |
| SARA 311/312:      | <u>Health:</u>  | Acute – No<br>Chronic - Yes | <u>Fire:</u> No | <u>Reactivity:</u> None | <u>Release of Pressure:</u> No |
| SARA 302 EHS List: | None of the components of this product are listed.  |                             |                 |                         |                                |

\*RQ = Reportable Quantity

STATE RIGHT-TO-KNOW STATUS

| Component         | California | New Jersey | Pennsylvania | Massachusetts | Michigan   |
|-------------------|------------|------------|--------------|---------------|------------|
| Lead              | X          | X          | X            | X             | X          |
| Copper/Zinc Alloy | Not listed | Not listed | Not listed   | Not listed    | Not listed |

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65)

Warning! This product contains detectable amounts of a chemical known to the State of California to cause cancer and/or birth defects or other reproductive harm.

#### GHS CLASSIFICATION

STOT RE Category 2  
Reproductive Toxicity Category 2  
Aquatic Environment, Chronic II

#### EUROPEAN REGULATIONS

All chemical components listed on EINECS

#### Hazard Classification

Danger Symbols: Xn, N  
Risk Phrases: R48, R62/63, R51/53  
Safety Phrases: S2, S20/21, S22, S39, S51, S61  
German WGK Classification: Not known.

#### CANADIAN REGULATIONS

DSL/NDSL Inventory: The components of this product are on the DSL  
IDL: Lead  
CEPA PRIORITIES LIST: None  
WHMIS: This product is not subject to WHMIS. It is considered to be a manufactured article.

#### JAPANESE REGULATIONS

Existing National Inventory of Chemical Substances (ENCS): The components of this product are Listed  
Japanese Priority Assessment Chemical Substances: None of the components of this product s are listed

#### OTHER INTERNATIONAL CHEMICAL INVENTORIES

Swiss Giftlist List of Toxic Substances: All Components Listed  
Australian Inventory (AICS): All Components Listed

#### 16. OTHER INFORMATION

REVISIONS: 02  
PREPARED BY: Olin Corporation  
OTHER: Additional information available from: [www.winchester.com](http://www.winchester.com)

**NOTICE:** THE INFORMATION IN THIS SDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. OLIN BELIEVES THIS INFORMATION TO BE RELIABLE AND CURRENT AS OF THE DATE OF PUBLICATION, BUT MAKES NO WARRANTY THAT IT IS.