

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:** **PRIMER CUPS AND ANVILS**  
**CAS Number:** Mixture – Metal Alloy  
**Synonyms:** Centerfire Primer Cup, Centerfire Anvil  
**Product Use:** Centerfire Primer Components  
**U.N. Number:** None  
**U.N. Dangerous Goods Class** Not regulated  
**Manufacturer/Responsible Party:** Olin Winchester, LLC  
**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  
**MSDS Control Group:** 618-258-3507 (Technical Information Only)

**Olin SDS No.:** 00103.0001

**Issue Date:** 05/28/15

**Revision Date:** 02/28/2019

**Revision No.:** 5

## 2. HAZARDS IDENTIFICATION

Warning!

EMERGENCY OVERVIEW: PRODUCT MAY CAUSE AN ALLERGIC SKIN REACTION. DO NOT TAKE INTERNALLY.

US DOT SYMBOLS

None

CANADA (WHMIS) SYMBOLS

This Product is not subject to WHMIS

GHS HAZARD SYMBOLS



**GHS Classifications:** Skin Sensitization, Category 1  
Hazardous to the Aquatic Environment, Chronic Category 3

**Signal Word:** Warning

**Hazard Statements :** H317: May cause an allergic skin reaction  
H412: Harmful to aquatic life with long lasting effects

**Target organs:** None

**Precautionary Statements:** P262: Do not get in eyes, or on skin  
P273: Avoid release to the environment  
P280: Wear protective gloves/eye protection  
P391: Collect spillage  
P501: Dispose of product properly

**GHS Pictograms:** GHS07: Exclamation mark

**EU Classifications:**

Hazard Symbols Xi  
Risk Phrases R43: May cause sensitization by skin contact  
R52/53: Harmful to aquatic organisms and may cause long-term adverse effects

Safety Phrases S24/25: Avoid contact with skin and eyes  
S37/39: Wear suitable gloves and eye protection  
S61: Avoid release to the environment

### **Health Hazards or Risks From Exposure**

This product is the finished metal alloy primer used in centerfire ammunition. Therefore, under normal handling of this product, no exposure to any harmful materials will occur. The product contains trace amounts of these harmful substances:

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

**Nickel:** Repeated exposure may cause an allergic skin reaction consisting of itching, redness, swelling, and rash or urticaria (hives) in sensitized individuals. Epidemiological studies in humans have shown an association between lung and nasal cancers and prolonged occupational exposures to high concentrations of nickel.

It is unlikely that someone would be exposed to a significant amount of copper or nickel from handling these metal pieces.

### **3. COMPOSITION / INFORMATION ON INGREDIENTS**

Components	% By Weight	CAS Number	EINECS/ ELINCS #
Copper	68 – 72	7440-50-8	231-159-6
Zinc	29 - 31	7440-66-6	231-175-3
Nickel	0 – 1	7440-02-0	231-111-4

### **4. FIRST AID MEASURES**

**Eye Contact:** Immediately flush out trace material with water, 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:** Not applicable

**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.

Recommendations To Physicians:

No specific antidote available, treat symptoms

**5. FIRE FIGHTING MEASURES**

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

Unusal Fire and Explosion Hazards:

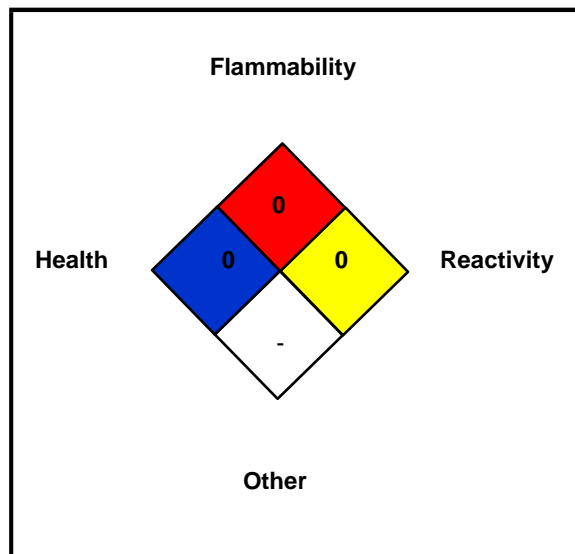
None.

Extinguishing Media:


Choose extinguishing media suitable for surrounding materials.

Special Firefighting Procedures:

In case of fire, use normal fire fighting equipment.

**NFPA RATING SYSTEM**

## HMIS RATING SYSTEM

HEALTH HAZARD (BLUE)		0	
FLAMMABILITY HAZARD (RED)		0	
PHYSICAL HAZARD (YELLOW)		0	
PROTECTIVE EQUIPMENT			
EYES	PPE CODE	RESPIRATORY	HEARING
	B	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. If, however, a large spill occurs, call 1-888-289-1911 for technical assistance.

Accidental Release Procedures:

Collect material and place 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 after handling.

Conditions for Safe Storage:

Store in original containers away from Acids.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

CAS #	CHEMICAL NAME	ACGIH TLV	OSHA PEL	INTERNATIONAL OELS
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) 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) Denmark: 1.0 mg/m <sup>3</sup> (dust and powder) 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
7440-02-0	Nickel	1.5 mg/m <sup>3</sup> (inhalable)	1.0 mg/m <sup>3</sup>	Germany, MAK = 1 mg/m <sup>3</sup> Canada (B.C.), Czechoslovakia, Denmark, Norway – 0.05 mg/m <sup>3</sup> , K1, sensitizer Poland = 0.25 mg/m <sup>3</sup> Ireland, Sweden, Switzerland, U.K. = 0.5 mg/m <sup>3</sup> Belgium, Canada (Alberta & others), Finland, Japan, Mexico, Netherlands – 1 mg/m <sup>3</sup> Portugal = 1.5 mg/m <sup>3</sup>

<u>Engineering Controls:</u>	Local exhaust ventilation is recommended if significant dusting occurs or fumes are generated. Otherwise, use general exhaust ventilation.
<u>Respiratory Protection:</u>	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.
<u>Eye/Face Protection:</u>	Safety glasses
<u>Hand Protection:</u>	Gloves
<u>Skin Protection:</u>	Not normally needed
<u>Hearing Protection:</u>	Not normally needed.
<u>General Hygiene:</u>	Wash hands thoroughly after use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	VALUE	PROPERTY	VALUE
<i>Appearance:</i>	Small metal alloy pieces, Red/gold metallic color (non-plated); silver colored (nickel 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 (g/cc):</i>	8.66
<i>Specific gravity (g/cc):</i>	8.66	<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

<u>Stability:</u>	Stable under normal temperatures and pressure.
<u>Possibility of Hazardous Reactions:</u>	Hazardous polymerization will not occur
<u>Incompatible Materials:</u>	Acids
<u>Hazardous Decomposition Products:</u>	None. Reaction with acids may liberate explosive hydrogen gas.
<u>Conditions to Avoid:</u>	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.

Effects Of Acute Exposure:

PRODUCT		COMPONENTS		
		Nickel	Copper	Zinc
Inhalation LC <sub>50</sub>	Inhalation unlikely	>12 mg/kg, it (rat)	No data	No data
Skin Contact LD <sub>50</sub>	Skin absorption unlikely	>7.5 g/kg, sc (rabbit)	375 mg/kg, sc (rabbit)	No data
Ingestion LD <sub>50</sub>	Ingestion unlikely	>5 g/kg (rat)	3.5 mg/kg, ip (mouse)	No data
Irritation	Not a skin or eye irritant as a solid.	Respiratory irritant	Respiratory irritant	Eye irritant
Sensitization	Sensitization to this Product has not been reported	Skin sensitizer	No data	No data

Other Adverse Effects:Target Organ Toxicity:

No reported target organ toxicity from this product.

Reproductive Toxicity:

This product is not known or reported to cause reproductive effects. Exposure of male rats to high concentrations of nickel caused testicular degeneration.

Teratogenicity (Birth Defects):

This product is not known or reported to cause developmental toxicity.

Mutagenicity:

This product is not known or reported to be mutagenic. Nickel has been shown to be mutagenic in *in vitro* studies.

Carcinogenicity:

This product is not listed as a carcinogen by OSHA, NTP or IARC. In laboratory animal studies, chronic exposure to high concentrations of nickel has caused an increase in lung and nasal tumors. IARC has classified nickel as possibly carcinogenic to humans, group 2B.

**12. ECOLOGICAL INFORMATION**Environmental Effects:

PRODUCT: Product has not been tested for environmental properties.

## 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.

Nickel:

Freshwater algae (4 species), 72 hr. EC<sub>50</sub> = 0.1 mg/L; *Daphnia magna*, 96 hr LC<sub>50</sub> = 0.51 mg/L; Rainbow trout, 96 hr LC<sub>50</sub> = 31.7 mg/L; Fathead minnow, 96 hr LC<sub>50</sub> = 3.1 mg/L

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:

No data

## PERSISTANCE/DEGRADABILITY:

Not biodegradable.

## 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:Proper Shipping Name:

None

This material is not regulated as a DOT hazardous material.

Hazard Class Number and Description:

None

UN Identification Number:

None

Packing Group:

None

DOT Label(s) Required:

None

Additional Information:

None

**15. REGULATORY INFORMATION**US FEDERAL

TSCA	The components of this product are listed on the Toxic Substance Control Act inventory.				
CERCLA:	Copper, R.Q.* = 5000 lbs.; Zinc, R.Q. = 1000 lbs.; Nickel, R.Q. = 100 lbs. (No reporting is required if diameter of the pieces of metal is equal to or exceeds 100 micrometers (0.004 inches)).				
SARA 313:	Copper, Nickel, Zinc (fume or dust)				
SARA 311/312:	<u>Health:</u>	Acute – No Chronic - No	<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
Copper	Not listed	X	X	X	X
Zinc	Not listed	X	Not listed	X	X
Nickel	X	X	X	X	X

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

Skin Sensitization, Category 1

Hazardous to the Aquatic Environment, Chronic Category 3

EUROPEAN REGULATIONS

All chemical components listed on EINECS

Hazard Classification

Danger Symbols: Xi

Risk Phrases: R43, R52/53

Safety Phrases: S24/25, S37/39, S61

German WGK Classification: Not known.

CANADIAN REGULATIONS

DSL/NDSL Inventory: The components of this product are on the DSL

IDL: Copper, Nickel

CEPA PRIORITIES LIST: None

WHMIS: This product is considered to be a manufactured article and therefore not subject to WHMIS requirements.

## 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 are listed

## OTHER INTERNATIONAL CHEMICAL INVENTORIES

Swiss Giftliste List of Toxic Substances: All Components Listed

Australian Inventory (AICS): All Components Listed

## 16. OTHER INFORMATION

*REVISIONS:* 05

*DATE:* 02/28/2019

*PREPARED BY:* Olin Winchester, LLC

*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.