



CCI / SPEER

MATERIAL SAFETY DATA SHEET

SECTION 1. MANUFACTURER INFORMATION

MANUFACTURED BY: CCI/SPEER
ADDRESS: 2299 Snake River Avenue
 Lewiston, Idaho 83501
TELEPHONE #: (208) 746-2351 (24 HOURS)
EMERGENCY CONTACT: Chief Chemist or Safety Department
TRANSPORTATION EMERGENCY CONTACT: CHEMTREC 1-800-424-9300
MSDS DATE: 01/19/99 **REVIEW DATE** 8/20/07 **REVISION DATE** 8/20/07

SECTION 2. PRODUCT INFORMATION

PRODUCT NAME: Clean-Fire ZNT Ammunition, Brass Shell Case

SYNONYMS:

FORMULA NA **C.A.S.#** NA

DOT PROPER SHIPPING NAME: Cartridges, small arms

UNITED NATIONS (UN) DESIGNATION: 0012 **HAZARD CLASSIFICATION:** 1.4S (ORM-D Domestic)

NFPA: **HEALTH:** **FLAMMABILITY:** **REACTIVITY:** **SPECIAL:** EXPLOSIVE

HAZARDOUS INGREDIENTS **PERCENT** **CAS NUMBER** **UEL/LEL** **EXPOSURE LIMITS**

Copper * +		7440-50-8	NE	1 MG/M ³
Zinc * +		7440-66-6	NE	5 MG/M ³ (Resp. Dust)
Nitrocellulose		9004-70-0	NE	NA
Nitroglycerin *		55-63-0	NE	0.2 PPM Ceiling
Aluminum * +		7429-90-5	NE	5 MG/M ³ (Resp. Dust)

NA = NOT AVAILABLE NE = NOT ESTABLISHED MG/M3 = MILLIGRAMS PER CUBIC METER OF AIR
 PPM = PARTS PER MILLION REFERENCE OSHA 29 CFR 1910.1000 TABLE Z-1

(*) INDICATES TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR 372.

(+) CERTAIN COMPONENTS LISTED IN THE INGREDIENTS SECTION INCLUDE CASE MATERIAL, PROJECTILE OR OTHER INERT COMPONENTS AND ARE NOT EXPECTED TO BE AN EXPOSURE HAZARD UNDER NORMAL HANDLING CONDITIONS.

MSDS DATE: 01/19/99 REVIEW DATE 10/01/04 REVISION DATE 06/13/05
Page 2

SECTION 3. PHYSICAL HAZARDS

COMBUSTIBLE LIQUID	NO	SKIN HAZARD	YES
FLAMMABLE	NO	EYE HAZARD	YES
PYROPHORIC	NO	TOXIC AGENT	NO
EXPLOSIVE	YES	SENSITIZER	NO
UNSTABLE	NO	CARCINOGEN	NO
WATER REACTIVE	NO	REPRODUCTIVE TOXIN	NO
OXIDIZER	YES	BLOOD TOXIN	NO
ORGANIC PEROXIDE	NO	NERVOUS SYSTEM TOXIN	NO
CORROSIVE	NO	LUNG TOXIN	NO
COMPRESSED GAS	NO	LIVER TOXIN	NO
IRRITANT	YES	KIDNEY TOXIN	NO

POTENTIAL HEALTH EFFECTS

INHALATION: After ammunition has been fired, dust, vapors, and/or fumes may be irritating to the respiratory system and can result in both acute and chronic overexposure. *

INGESTION: When ammunition is fired or otherwise discharged, dust, vapors, and/or fumes may be absorbed by the digestive system and can result in both acute and chronic overexposure. * Ingestion of a complete round can cause irritation to the digestive system, and possibly other unknown health effects.

SKIN CONTACT: After ammunition has been fired, dust, vapors, and/or fumes may cause irritation. * Projectiles from fired ammunition can cause puncture wounds.

SKIN ABSORPTION: Skin absorption is not expected to occur.

EYE CONTACT: After ammunition has been fired, dust, vapors, and/or fumes may cause irritation.

SECTION 4. FIRST AID MEASURES

EYES: If chemicals are gotten in the eyes, flush with copious quantities of water for at least 15 minutes. Get medical attention. If physical injury has occurred because of projectiles, get immediate medical attention.

SKIN: Wash thoroughly with soap and water. If physical injury has occurred because of projectiles, get immediate medical attention.

INHALATION: Remove from exposure. Get medical attention If experiencing effects of overexposure. *

ACCIDENTAL INJURY FROM FIRED CARTRIDGE: Fired ammunition can create serious injury, possibly both entrance and exit wounds. To avoid serious injury, use ammunition only in good condition and originally chambered for a particular caliber. Always keep the barrel free of any obstruction. If the gun fails to fire, a delayed firing may occur, or the gun may fire upon being opened. Keep gun muzzle pointed in a safe direction. Wait 30 seconds. Avoid exposure to breech. Carefully unload. A fired bullet has an extremely long range and can cause serious injury or death. Always be sure of the backstop, and practice safe muzzle control at all times. Avoid firing at surfaces that could result in a ricochet, such as water, rocks, or any other hard, flat surface. *

All hazards marked with an asterisk (*) are not expected to be present unless the product is fired, or otherwise discharged so that gasses, fumes, or projectiles are created. Normal handling and shipping should not cause exposure to these hazards.



MSDS DATE: 01/19/99 REVIEW DATE 10/01/04 REVISION DATE 06/13/05
Page 3

SECTION 5. EMERGENCY RESPONSE INFORMATION

IF PRODUCT IS INVOLVED IN FIRE: Use water. Fog type application to surrounding areas and other combustibles will reduce the potential for fire spread and will lower temperatures of the product.

FIREFIGHTERS: Must be protected from explosion of material. Normal fire fighting attire will provide limited protection at certain distances if product is packaged. If product is unconfined, there is a greater risk for injury from projectiles. Product may explode if heated above 200 degrees C.

TRANSPORTATION EMERGENCIES: Contact CHEMTREC at 1-800-424-9300. Consult the DOT Emergency Response Guidebook for instructions for handling emergencies involving this product.

SECTION 6. ACCIDENTAL SPILL/RELEASE MEASURES

Dry sweeping can contain spilled product. The recommended means for disposing of scrap is by incineration. Incineration must be at a fully permitted facility specifically designed and permitted in accordance with all applicable local, state, and federal regulations.

After scrapped by proper incineration, the remaining scrap materials should be disposed of or recycled in accordance with local, state, and federal regulations.

SECTION 7. HANDLING AND STORAGE PRECAUTIONS

Store in a cool dry place. Do not crush or drop packages. Avoid heat, electrical current, and acids. CCI-SPEER products are packaged and shipped in accordance with applicable Department of Transportation (DOT) rules. To ensure the highest level of safety while storing these products, keep product in the original packaging until ready to use. **Keep away from fire.**

SECTION 8. EXPOSURE CONTROL MEASURES

VENTILATION: Mechanical ventilation must be provided if necessary to keep the exposure levels below the exposure limits.

RESPIRATORS: If airborne concentrations exceed the Permissible Exposure Limit (PEL), wear respiratory protection in accordance with the OSHA Standard for Respiratory Protection, 29 CFR 1910.134.

HEARING PROTECTION: If noise levels exceed OSHA limits, while firing this product, use hearing protection in accordance with OSHA's Hearing Conservation Standard, 29 CFR 1910.95.

EYE PROTECTION: Wear ANSI-approved goggles or safety glasses.

HAND PROTECTION: NA

SKIN PROTECTION: If good personal hygiene practices are observed after firing this product, skin exposure problems are not anticipated.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Not Applicable	DECOMPOSITION TEMPERATURE	Not Applicable
FREEZING POINT:	Not Applicable	SOLUBILITY IN WATER	Not Applicable
BOILING POINT:	Not Applicable	EVAPORATION RATE	Not Applicable
SPECIFIC GRAVITY:	Not Applicable	MOLECULAR WEIGHT	Not Applicable
BULK DENSITY:	Not Applicable	VOLATILES, PERCENT BY VOLUME	Not Applicable
VAPOR PRESSURE:	Not Applicable	ODOR	Not Applicable
VAPOR DENSITY:	Not Applicable		



MSDS DATE: 01/19/99 **REVIEW DATE** 10/01/04 **REVISION DATE** 06/13/05
Page 4

SECTION 10. STABILITY AND REACTIVITY

This product is normally stable. However, because of the design of ammunition and its components, partial detonation upon impact or intense heat may occur. Mass detonation will not occur. Keep away from fire.

SECTION 11. HANDLING AND DISPOSAL OF SCRAP

The recommended means for disposing of scrap is by incineration. Incineration must be at a fully permitted facility specifically designed and permitted in accordance with all applicable local, state, and federal regulations.

After scrapped by proper incineration, the remaining scrap materials should be disposed of or recycled in accordance with local, state, and federal regulations.

SECTION 12. OTHER INFORMATION

The information in this MSDS was obtained from sources that we believe are reliable. However, the information is provided without any representation or warranty, expressed or implied, regarding the accuracy or correctness.

The conditions or methods of handling, storage, use and disposal of this product are beyond our control and may be beyond our knowledge. For these and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of this product.