

MATERIAL SAFETY DATA SHEET



Bullets, Slugs, Buckshot and
Muzzleloader Projectiles

MSDS REV. DATE: 06/08/10

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Hornady Bullets, Slugs, Buckshot and Muzzleloader Projectiles

TRADE NAMES: InterBond®, SST®, V-MAX™, Varmint™, InterLock®, A-MAX®, XTP®, XTP®-MAG™, Frontier™, HAP®, Great Plains®, L-N-L® Speed Sabot®, FPB®, FTX®, Cowboy™, DGS®, DGX®

SYNONYMS AND VARIATIONS: Bullets, projectiles, slugs, FMJ, SWC, HBWC, SWC, RN, HP, FP, ENC, BTHP, BTSP, BT, SP, SJ, Match, Moly, Buckshot, PA Conical, Round Ball, Hard Ball, lead test cylinders.

MANUFACTURER: Hornady Manufacturing Company

ADDRESS: 3625 W. Old Potash Hwy
Grand Island, NE 68803

EMERGENCY PHONE: 800-338-3220

CHEMTREC PHONE: 800-424-9300 **CHEMTREC INTERNATIONAL:** +703-527-3887

OTHER CALLS: (308) 382-1390

PRODUCT USE: Firearm projectiles

PREPARED BY: M. Spencer

HMIS® Ratings

| | |
|---------------------|---|
| HEALTH | 1 |
| FLAMMABILITY | 0 |
| REACTIVITY | 0 |
| PERSONAL PROTECTION | A |

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:

| NAME | CAS# | %WT | 313 | OSHA PEL TWA (mg/m ³) | ACGIH TLV TWA (mg/m ³) |
|----------------------|-----------|--------|-----|--------------------------------------|---------------------------------------|
| Aluminum | 7429-90-5 | 0-7 | Yes | 5.0 (dust/fume) | 5.0 (dust/fume) |
| Antimony | 7440-36-0 | 0-5 | Yes | 0.5 | 0.5 |
| Copper | 7440-50-8 | 0-45 | Yes | 1.0 (Dust) | 1.0 (Dust) |
| Lead | 7439-92-1 | 25-100 | Yes | 0.05 | 0.05 |
| Molybdenum Disulfide | 1317-33-5 | 0-<1 | No | 15 (as Mo) | 5.0 |
| Zinc | 7440-66-6 | 0-20 | Yes | 15 (dust) | N/A |

SECTION 2 NOTES:

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Do not take internally. Keep away from sources of ignition. Byproducts of use may be harmful if inhaled. Avoid long-term contact between exposed lead and skin/ clothing.

ROUTES OF ENTRY: Inhalation, ingestion, eyes

POTENTIAL HEALTH EFFECTS

EYES: None during normal handling. Firing projectiles may result in airborne particles/fragments. Particles/fragments may cause irritation or eye injury if safety glasses are not used.

SKIN: Minimal irritation. Wash hands after handling and before eating, drinking or smoking to reduce chances of ingestion.

INGESTION: Ingestion of lead dust or fume can eventually lead to damage to central and peripheral nerves, blood and kidneys. It may also cause damage to male reproductive system and, in females, to the unborn fetus. Damage to nerves can cause reduced motor nerve and muscle function. May cause anemia. Lead has been identified as an animal carcinogen and may produce cancer in humans. Ingestion of molybdenum in sufficient quantities may cause gastrointestinal irritation, diarrhea, coma and death from cardiac failure. See section 11 for toxic quantities.

INHALATION: Inhalation of dust/fume may lead to the effects described above (Ingestion), as well as respiratory irritation.

ACUTE HEALTH HAZARDS: Lead Ingestion/Inhalation may cause irritation to nose, throat, upper respiratory tract and lungs. The irritant effects may lead to bronchitis, headache, fall in blood pressure, weakness, convulsions, and collapse. Severe poisoning may impair vision by damaging the optic nerve. Particulates from firing: Eye irritation or injury, skin irritation. Inhaling large amounts of copper dust may cause nasal and respiratory irritation as well as nausea and vomiting. Zinc ingestion may cause headache, nausea, fever. Acute molybdenum poisoning can lead to gastrointestinal irritation, diarrhea, coma and death from cardiac failure.

MATERIAL SAFETY DATA SHEET



Bullets, Slugs, Buckshot and
Muzzleloader Projectiles

MSDS REV. DATE: 06/08/10

CHRONIC HEALTH HAZARDS: Ingestion or inhalation of **lead** may have effects on the blood, bone marrow, central nervous system, peripheral nervous system and kidneys, resulting in anemia, encephalopathy (e.g., convulsions), peripheral nerve disease, abdominal cramps and kidney impairment. Causes toxicity to human reproduction or development. Chronic **molybdenum** poisoning may cause loss of weight, anemia, reproductive harm, osteoporosis and joint deformity.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Respiratory conditions easily aggravated by airborne dust or particulates.

CARCINOGENICITY

OSHA: No **IARC:** Possible (group 2b) (lead)
OTHER: **EPA:** Probable human carcinogen (lead)

SECTION 3 NOTES: The physical form of these products makes it unlikely that exposure of any significant amount will occur. Exposure is most likely during ammunition loading operations and can easily be mitigated by sensible hygiene practices; always wash hands after handling projectiles, especially before eating or using tobacco. Firing ammunition will produce small particles that could contain minute amounts of the chemicals listed in section 1. Greatest exposure will occur if firing takes place indoors. See section 8 for exposure controls.

SECTION 4: FIRST AID MEASURES

EYES: Immediately flush out fume or particles with large amounts of water for at least 15 minutes. If irritation develops, call physician.

SKIN: Wash affected skin thoroughly with soap and water.

INGESTION: If ingested, call physician immediately.

INHALATION: If signs of lung irritation occur, remove victim to fresh air immediately. If breathing has stopped, give CPR and get medical attention immediately.

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: N/A
(% BY VOLUME) **LOWER:** N/A

FLASH POINT:

F: N/A

C: N/A

METHOD USED: N/A

AUTOIGNITION TEMPERATURE:

F: N/A

C: N/A

HMIS HAZARD CLASSIFICATION

HEALTH: 1

FLAMMABILITY: 0

Physical: 0

OTHER:

EXTINGUISHING MEDIA: Not relevant to this product. Choose extinguishing media suitable to surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES: Use SCBA.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides, fumes and dusts from metals listed in section 1.

SECTION 5 NOTES:

MATERIAL SAFETY DATA SHEET



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MSDS REV. DATE: 06/08/10

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Spills will not normally require emergency response. If spill is large or other assistance is required, call 800-338-3220 or CHEMTREC at 800-424-9300.

SECTION 6 NOTES: See section 15 for reportable quantities of spilled material.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Store in a cool, dry area. Wash hands after handling.

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use of proper range filtration and airflow when firing projectiles indoors.

VENTILATION: None required during normal handling and loading. Use mechanical ventilation when firing projectiles indoors to maintain exposures below PEL. Ventilation should not be required outdoors.

RESPIRATORY PROTECTION: Not normally needed.

EYE PROTECTION: Safety glasses

SKIN PROTECTION: Not normally needed, wash hands after handling.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Use adequate hearing protection when firing projectiles.

WORK HYGIENIC PRACTICES: Wash hands thoroughly after handling and before eating, drinking or using tobacco.

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Cylindrical projectile. May be pointed, flat tipped, hollow point or polymer point. Projectile may be lead only (grey) or may be fully or partially jacketed in copper or brass. Moly coated bullets will be dark grey.

ODOR: None

PHYSICAL STATE: Solid

pH AS SUPPLIED: N/A

pH (Other): N/A

BOILING POINT: N/A

MELTING POINT: N/A

FREEZING POINT: N/A

VAPOR PRESSURE (mmHg): N/A

VAPOR DENSITY (AIR = 1): N/A

SPECIFIC GRAVITY (H₂O = 1): N/A

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: Insoluble

PERCENT SOLIDS BY WEIGHT: 100%

PERCENT VOLATILE: N/A

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MSDS REV. DATE: 06/08/10

VOLATILE ORGANIC COMPOUNDS (VOC): N/A
MOLECULAR WEIGHT: N/A, Mixture
VISCOSITY: N/A
SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID (STABILITY): Open flame/high heat (melting).

INCOMPATIBILITY (MATERIAL TO AVOID): Acids and caustics

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Oxides, fume and dusts from metals listed in section I.

HAZARDOUS POLYMERIZATION: Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

| | Lead | Antimony | Copper | Molybdenum | Aluminum | Zinc |
|---------------------------|-----------------------|----------------------|--------------------------|-------------------------|----------|---------------------------------|
| LD-50 (oral) | N/A | 7 g/Kg (rat) | 1,000 mg/m ³ | N/A | N/A | 7,950 mg/Kg (mouse) |
| LC-50 (inhalation) | N/A | N/A | >2,000 mg/m ³ | N/A | N/A | 2,500 mg/m ³ (mouse) |
| IDLH | 100 mg/m ³ | 50 mg/m ³ | 100 mg/m ³ | 5,000 mg/m ³ | N/A | 500 mg/ m ³ |

SECTION 11 NOTES: Under conditions of intended use and expected incidental exposure, greatest potential toxicity is from lead.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: This product has no ecological information available. Individual component information is as follows:

Lead: Toxic to waterfowl, high concentrations may be toxic to other aquatic species. Lead may migrate through soil and surface/ground water. Lead will accumulate in the environment through decomposition or fragmentation of projectile. Will not biodegrade.

Copper: Toxic to aquatic species. Concentration required for toxicity varies with water chemistry, light transmittance and other factors. Generally accepted level for aquatic toxicity is >1.0mg/L.

Aluminum: 1-5ppm for some species may be toxic.

Zinc: Depending on conditions, as little as .13mg/L may be toxic to some species.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Recycle product if at all possible. Product that has become waste may be considered hazardous and must be disposed of accordingly. The user of this product is responsible for seeing that it is disposed of in accordance with all federal, state and local laws. For more information regarding disposal or recycling of this product contact the manufacturer.

RCRA HAZARD CLASS: D008

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION
NOT REGULATED AS HAZARDOUS MATERIAL

AIR TRANSPORTATION
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MSDS REV. DATE: 06/08/10

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): Components are listed on the Toxic Substances Control Act Inventory.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): CERCLA RQ's: Lead= 10 lbs., Copper= 5,000 lbs., Antimony= 5,000 lbs., Zinc= 1,000 lbs. Reporting is not required for metals (lead, copper, antimony and zinc) if the mean diameter of the particle is greater than .004 inches.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

311/312 HAZARD CATEGORIES: None

313 REPORTABLE INGREDIENTS: see section 1

STATE REGULATIONS (Right-To-Know):

New Jersey: Copper, Lead, Antimony, Zinc

Pennsylvania: Copper, Lead, Antimony,

Massachusetts: Copper, Lead, Antimony, Zinc

Michigan: Copper, Lead, Antimony, Zinc

CA. PROPOSITION 65: Lead

SECTION 15 NOTES: *Not intended to be all-inclusive, only selected regulations represented.*

SECTION 16: OTHER INFORMATION

DISCLAIMER: Hornady Manufacturing Company believes the information contained in this MSDS to be accurate and complete as of the date of publication, however no responsibility is assumed for the suitability of this data to the end user or for omissions or errors in its content. This sheet should be provided to all who use, handle, transport or store the material in question.