Remington Arms *Material Safety Data Sheet*

This Material Safety Data Sheet has been prepared in compliance with Federal OSHA Hazard Communication Standard 29 CFR 1910.1200, ANSI Z400.1-1993 and the ISO Safety Data Sheet Standard. This product may be considered to be a hazardous chemical under 29 CFR 1910.1200. This information is required to be disclosed for safety in the workplace. ***This MSDS is applicable only to the product identified herein and only when used properly.***

NOTE: Refer to Section XVII for *List of Acronyms.*

I. PRODUCT IDENTIFICATION

Product: **COMPONENT EMPTY SHELLCASES (UNPRIMED) (SHOTSHELL)**

HMIS Rating
Health: 0
Flammability: 0
Reactivity: 0

IN EVENT OF EMERGENCY
(Spill, Leak, Fire, Exposure, Accident)
CALL CHEMTREC DAY OR NIGHT
(800) 424-9300
In Arlington, VA 741-5000
Outside Continental U.S.A. (703) 741-5000

II. HAZARDOUS COMPONENT INFORMATION

Component Shotshell Empty Shellcase (Unprimed) is comprised of the following two (2) components. The hazardous chemicals contained in each are listed. The percent by weight of the hazardous ingredients in Component Shotshell Empty Shellcase (Unprimed) are listed in the table below.

1. **Plastic Shotshell Case**..... Polyethylene (No hazardous chemicals contained in plastic shotshell case.)
2. **Shotshell Cap**..... Copper, Zinc, Iron

Hazardous Ingredients	Percent by Weight	CAS Number	Exposure Limits (PEL)
Copper	0.4-40%	7440-50-8	None established
Zinc	0.17-18%	7440-66-6	TWA (fume) 0.1 mg/m³ TWA (dust, mist) 1.0 mg/m³
Iron	0-53%	1309-37-1	TWA 10 mg/m³

III. HAZARDS IDENTIFICATION

Emergency Overview: N/A

Potential Human Health Effects:

Skin Contact: N/A

Eye Contact: N/A

Inhalation: N/A

Ingestion/Absorption: N/A

Carcinogenicity Information: This product is not classified a carcinogen by IARC, OSHA, NTP or EPA.

IV. FIRST AID MEASURES

Skin Contact: N/A

Eye Contact: N/A

Inhalation: N/A

Ingestion/Absorption: N/A

V. FIRE HAZARDS

Flammable Properties: Material will burn, but will not ignite readily.

Extinguishing Media: Flood fire with water to fight fire and cool shells. If no water is available, use carbon dioxide, dry chemical or earth.

Fire-Fighting Instructions: Evacuate area immediately. Deluge area with water.

VI. ACCIDENTAL RELEASE MEASURES

Safeguards: N/A

Spill Cleanup: If disposal is necessary, refer to *XIII. DISPOSAL CONSIDERATIONS*.

Accidental Release: See above.

VII. HANDLING AND STORAGE

Personnel Handling: N/A

Storage: No special storage required.

VIII. PERSONAL PROTECTION/EXPOSURE CONTROLS

Engineering Controls: N/A

Personal Protective Equipment: N/A

Exposure Guidelines: N/A

Exposure Limits: Exposure limits listed with each hazardous chemical.

IX. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DATA

Form:	Solid	**Evaporation Rate:**	N/A
Color:	Variable	**Melting Point:**	100°C-400°C
Odor:	None	**Solubility in Water:**	N/A
Boiling Point:	N/A	**pH:**	N/A
Specific Gravity:	N/A		
Vapor Pressure:	N/A		
Vapor Density:	N/A		

X. STABILITY AND REACTIVITY

Chemical Stability: Stable. Will not react with water.

Other Hazards:
Incompatibility: N/A
Polymerization: Will not occur.

Conditions to Avoid: N/A

XI. TOXICOLOGICAL INFORMATION

Oral LD 50: No available data.
Dermal LD 50: No available data.
Inhalation LC 50: No available data.
Irritation: Not a skin or eye irritant.

XII. ECOLOGICAL INFORMATION

Aquatic Toxicity:

N/A

Environmental Impact:

When used and disposed of properly, there is no known environmental impact.

XIII. DISPOSAL CONSIDERATIONS

Dispose of as required by local, state and federal laws and regulations.

XIV. TRANSPORTATION INFORMATION

SHIPPING INFORMATION

Proper Shipping Name:	Empty, Unprimed Cartridge Case
Hazard Class:	N/A
UN/NA No:	N/A
Packing Group:	N/A
Shipping Label:	None required.
Special Information:	May be reclassified internationally as:

Hazard Class:	N/A
UN/NA No.:	N/A
Packing Group:	N/A
Shipping Label:	N/A

XV. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA Inventory Status: Included on list.

This product contains a toxic chemical or chemicals subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

XVI. OTHER INFORMATION

NFPA Rating: Not established.

HAZARD CLASSIFICATION

Chronic Health:	No known chronic health effects.
Acute Health:	When heated to decomposition, inhalation of fumes may cause irritation to nose, throat, upper respiratory tract and lungs.
Fire Hazard:	0 (per *HMIS Rating*)
Pressure Hazard:	None.
Reactivity Hazard:	0 (per *HMIS Rating*)

NPCA-HMIS Ratings:

Health:	0
Flammability:	0
Reactivity:	0

References:

Code of Federal Regulations, Monthly Summary, CFR 1910.1200(g) and Appendix E (B.), Regulations Management Corporation, Bloomington, Indiana, July 1, 1994.

Hazardous Chemical Desk Reference: Third Edition, Richard J. Lewis, Sr., Van Nostrand Reinhold, Copyright 1993.

American National Standards Institute, Z400.1-1993.

International Standards Organization Safety Data Sheet Standard.

XVII. LIST OF ACRONYMS

ACGIH	American Conference of Governmental Industrial Hygienists
AIHA WEEL	American Industrial Hygiene Association-Workplace Environmental Exposure Level
ANSI	American National Standard Institute
BEI	Biological Exposure Indexes
CAS	Chemical Abstract Service
CFR	Code of Federal Regulations
CL	Ceiling Limit (must not be exceeded)
DSL	Domestic Substances List
EPA	Environmental Protection Agency
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ISO	International Standards Organization
LC	Lethal Concentration
LD	Lethal Dose
MITI	Ministry of International Trade and Industry (Japan)
MSHA	Mine Safety and Health Appliance
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NTA	National Transportation Agency (Canada)
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
ORM	Other Regulated Materials
PEL	Permissible Exposure Limit (OSHA)
SCBA	Self-contained Breathing Apparatus
STEL	Short-Term Exposure Limit
TLV	Threshold Limit Values (ACGIH)
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
UN/NA	United Nations/North American (Identification number)
SARA	Superfund Amendments and Reauthorization Act
RCRA	Resource Conservation and Recovery Act

For additional information, please contact:

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Madison, NC 27025-0700

(800) 243-9700

The information contained in this *Material Safety Data Sheet* is provided to all individuals who are or will be exposed to this product through use, handling, storage or transport. Remington believes, yet makes no warranty, that all information contained in this document is current as of the date of publication.