LIGHTFIELD LLR CORPORATION

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LIGHTFIELD CORPORATION WILDLIFE CONTROL M.S.D.S. SHEET NO. LFW-4004

Dear Customer,

This Material Safety Data Sheet (M.S.D.S.) has been prepared by Lightfield LLR Corporation to assist you in recognizing, if any, the potential health and safety hazards associated with the commercial use of our product.

(1) PRODUCT IDENTIFICATION

Product Name: Lightfield Less Lethal Wildlife Control Shotshell Loaded Round

Product Code: 12 Gauge 2 3/4" **OO** Rubber Buckshot WRBS-12

12 Gauge 2 ¾" Mid-Range Rubber Slug
12 Gauge 2 ¾" Extended Range Rubber Slug
WMRS-12
12 Gauge 2 ¾" Mid-Range Double Ball
WMDB-12

Use Description: Assembly of shotshell loaded round components

OSHA Hazard Classification: Explosive

(2) COMPONENT DATA

PRODUCT COMPOSITION

The product consists of the following components:

12 GAUGE 2 3/4" OO Rubber Buckshot WRBS-12

COMPONENT	PERCENT	<u>PRODUCT</u>	CODE NUMBER
(1) Load	45-75%	Rubber Buckshot	WRBS-12-40300
(2) Plastic Hull	12-25%	Plastic Hull	WRBS-12-40301
(3) Plastic Wad (Powder)	5-12%	Plastic Wad (Powder)	WRBS-12-40302
(4) Disc Plastic (Load)	3-5%	Disc Plastic (Load)	WRBS-12-40303
(5) Propellant	4-11%	Smokeless Powder	WRBS-12-40304
(6) Primer	3-7%	Shotshell Primer	WRBS-12-40305

12 GAUGE 2 3/4" Mid-Range Rubber Slug WMRS-12

<u>COMPONENT</u>	<u>PERCENT</u>	<u>PRODUCT</u>	CODE NUMBER
(1) Load	45-75%	Rubber Slug (Black)	WMRS-12-41300
(2) Plastic Hull	14-27%	Plastic Hull	WMRS-12-41301
(3) Plastic Wad (Powder)	5-12%	Plastic Wad (Powder)	WMRS-12-41302
(4) Cardboard Wad (Spacer)	4-10%	Cardboard Wad (Spacer)	WMRS-12-41303
(5) Propellant	5-11%	Smokeless Powder	WMRS-12-41304
(6) Primer	3-7%	Shotshell Primer	WMRS-12-41305

12 GAUGE 2 3/4" Extended Range Rubber Slug WERS-12

COMPONENT	<u>PERCENT</u>	<u>PRODUCT</u>	CODE NUMBER
(1) Load	45-75%	Rubber Slug (Blue)	WERS-12-42300
(2) Plastic Hull	12-25%	Plastic Hull	WERS-12-42301
(3) Plastic Wad (Powder)	5-12%	Plastic Wad (Powder)	WERS-12-42302
(4) Cardboard Wad (Spacer)	4-10%	Cardboard Wad (Spacer)	WERS-12-42303
(5) Propellant	4-11%	Smokeless Powder	WERS-12-42304
(6) Primer	3-7%	Shotshell Primer	WERS-12-42305

12 GAUGE 2 3/4" Mid-Range Double Ball Round WMDB-12

<u>COMPONENT</u>	<u>PERCENT</u>	<u>PRODUCT</u>	CODE NUMBER
(1) Load	45-75%	Rubber Balls (2)	WMDB-12-43300
(2) Plastic Hull	12-25%	Plastic Hull	WMDB-12-43301
(3) Plastic Wad (Powder)	5-12%	Plastic Wad (Powder)	WMDB-12-43302
(4) Disc Cardboard (Load)	3-5%	Disc Cardboard (Load)	WMDB-12-43303
(5) Propellant	4-11%	Smokeless Powder	WMDB-12-43304
(6) Primer	3-7%	Shotshell Primer	WMDB-12-43305

LIGHTFIELD LESS LETHAL WILDLIFE CONTROL SHOTSHELL COMPONENTS

PRODUCT: (a) WRBS-12

(b) WMRS-12

(c) **WERS-12**

(d) **WMDB-12**

LOAD

Component: Rubber Buckshot (a)

Material:

PVC Compound, Black pellets, No odor.

Hazardous:

Yes, as fume or dust.

Component: Rubber Slug (b) (c)

Material:

PVC Compound, Black or Blue Cylindrical Shape, No odor.

Hazardous:

Yes, as fume or dust.

Component: Rubber Ball (d)

Material:

PVC Compound, Black Spherical, No odor.

Hazardous:

Yes, as fume or dust.

PLASTIC SHOTSHELL CASE

Plastic Tube (a) (b) (c) (d)

Chemical Name:

Polyethylene

Hazardous:

No

Steel

Hazardous:

No

Brass

Hazardous:

Yes, as fume or dust.

PLASTIC WAD (POWDER)

Plastic Wad (a) (b) (c) (d)

Chemical Name:

Polyethylene

Hazardous:

No

DISC PLASTIC (LOAD)

Disc Plastic (a)

Chemical Name:

Polyethylene

Hazardous:

No

DISC CARDBOARD (LOAD)

Disc Cardboard (b)

Chemical Name:

Cardboard

Hazardous:

No

CARDBOARD WAD (SPACER)

Cardboard Wad (b) (c)

Chemical Name:

Cardboard

Hazardous:

No

PROPELLANT

Smokeless Powder (a) (b) (c) (d)

Chemical Composition:

Nitrocellulose 89%
Nitroglycerine 9.7%
Diphenylamine 0.4%
Centralite I 0.9%

Added:-

Surface coating agent 1.5% Graphite 0.1%

Hazardous:

Yes

PRIMER

Primer (a) (b) (c) (d)

Chemical Name:

Steel

Hazardous:

No

Chemical Name:

Copper

Hazardous:

Yes, as fume or dust

Chemical Name:

Zinc

Hazardous:

Yes, as fume or dust

Chemical Name:

Lead Styphnate

Hazardous:

Yes, as fume or dust

Chemical Name:

Barium Nitrate

Hazardous:

Yes

SAFE HANDLING AND STORAGE PRECAUTIONS

- (a) Store in a dry, cool, and well-ventilated area away from all sources of ignition.
- (b) Do not subject to mechanical shock.
- (c) Do not take internally.
- (d) Avoid contact with skin, eyes, and clothing. Upon contact with skin or eyes wash off with water.
- (e) Shelf life limitations, 20-25 years.
- (f) Incompatible materials for storage or transport: Strong oxidizers, Class A & B explosives.

PHYSICAL DATA

(a) Appearance: Plastic cylinder

(b) Color: Green

PERSONNEL PROTECTIVE EQUIPMENT REQUIREMENTS

- (a) If product is used indoors or in poorly ventilated areas use explosion proof local exhaust ventilation.
- (b) Always use safety glasses when using this product.

FIRE AND EXPLOSIVE HAZARD INFORMATION

Explosive: Yes

Extinguishing Media:

Water spray

Try to prevent fire from reaching ammunition, flood with water. If no water is available use sand or foam.

Fire Fighting:

Use water to cool containers exposed to fire.

Evacuate all personal, including emergency services, for 150 feet (46 meters) in all directions. Ammunition fires are noisy, but can be safely and effectively extinguished by firefighters using standard fog nozzles. The fragments are low velocity and the standard fire fighting equipment, including face shields will provide protection.

STABILITY INFORMATION

- (a) Mechanical shock or impact: could detonate, based on primer.
- (b) Electrical (static) discharge: could detonate, based on primer.
- (c) Cartridge may detonate if case is punctured or severely damaged, based on primer.
- (d) Incompatible materials: Strong Acids and Caustics.
- (e) Hazardous decomposition products: Nitrogen Oxides, Carbon Monoxide, Carbon Dioxide, Lead oxides, led dust or fumes.

TRANSPORTATION INFORMATION

This material is regulated as **DOT** Hazardous Material.

DOT description from the Hazardous Materials Table 49 CFR 172.101:1. and (U.S.): Cartridges,

Small Arms, 1.45, UN0012, PG II

Water (IMO): Same as land.

Air (IATA/ICAO): Same as land.

Hazard Label/placard: Non* / 1.4S Via Air.

Reportable Quantity: Not applicable (Par 49 CFR 172.101, Appendix).

Emergency Guide: No. 50