



MODEL ALS1203 Tri-Dent .60 Cal Rubber Balls
 ALS1204 Hornets Nest, .32 Cal Rubber Balls
 ALS1204HV Hornets Nest, .32 Cal Rubber Balls,
 High Velocity

MATERIAL SAFETY DATA SHEET

EMERGENCY TELEPHONE: CHEMTREC (800)-474-9300

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATIONS STANDARD, 29 CFR 1910.1200. THIS PRODUCT MAY BE CONSIDERED TO BE A HAZARDOUS CHEMICAL UNDER THAT STANDARD. CONSULT STANDARD FOR SPECIFIC REQUIREMENTS.

SECTION 1 – PRODUCT IDENTIFICATION

Product Name	Tri-Dent .60 Cal Rubber Balls Hornets Nest, .32 Cal Rubber Balls Hornets Nest, .32 Cal Rubber Balls, High Velocity	Model Number	ALS1203 ALS1204 ALS1204HV
Manufacturer Name	AMTEC Less Lethal Systems, Inc.	Phone:	850-223-4066
Address	4700 Providence Road	Date Prepared	1/26/06
City, State, and Zip	Perry, FL 32347	MSDS #	MSDS-1204

SECTION 2 – HAZARDOUS INGREDIENTS

Hazardous Components	OSHA PEL	ACGIH TLV	Approximate Percentage	CAS Number
Projectile				
Polymer (Carbon Black)	3.5mg/m3	3.5mg/m3		133-86-4
Thermoplastic rubber mixture	Not Established	Not Established		
Cartridge Case				
HD Polyethylene Plastic w/inert coloring	Not Established	Not Established		9002-88-4
Brass	Not Established	Not Established		Not Available
Brass Plated Steel	Not Established	Not Established		Not Available
Nickel Zinc Plated Or Zinc Plated Steel	Not Established	Not Established		Not Available
Propellant				
Nitrocellulose	Not Established	Not Established		9004-70-0
*Nitroglycerine	2mg/m3 Ceiling	.46mg/m3 (skin)		55-63-0
Graphite	15mg/m3 (5mg/m3 As respirable dust)	2mg/m3		7782-42-5
Primer- *Lead Styphnate (As Lead)	.05mg/m3	.05mg/m3		12403-82-6
*Barium Nitrate (As Barium)	.5mg/m3	.5mg/m3		7440-38-3
Antimony Sulfide (As Antimony)	.5mg/m3	.5mg/m3		7440-36-0
Aluminum	15mg/m3 (5mg/m3 As respirable dust)	10mg/m3		7429-90-5
Nitrocellulose (See above)				
*Nitroglycerine (See above)				

SECTION 3 – PHYSICAL CHARACTERISTICS

Physical State	Solid	Boiling Point	NA	Vapor Pressure	NA
Reactivity in Water	NA	Melting Point	NA	Vapor Density	NA
Solubility in Water	No	Freezing Point	NA	Specific Gravity	NA
Odor & Appearance	Brass, brass plated steel or nickel/zinc plated steel. Base with a clear, red, orange, or brown plastic tube. No odor.				

SECTION 4 – FIRE & EXPLOSION DATA

Flammability	Yes	Flash Point	NA	Method Used	NA
Upper Flammability Limit in Air % by Volume			NA	Auto Ignition Temp.	NA
Lower Flammability Limit in Air % by Volume			NA		
Special Fire Fighting Procedures	Wear full fire-fighter protective gear including face shield or SCBA. Use fog pattern nozzle to stop any velocity fragments. Use water to cool ordinary combustibles below ignition temperature.				
Unusual Fire & Explosion Hazards	May ignite if heated to 250 degrees F, independent of air, unconfined ignited cartridges can produce low velocity metallic fragments, which may cause eye injury or superficial skin wounds if unprotected. Consider initial evacuation for 250 meters.				

SECTION 5 – REACTIVITY DATA

Stability	<input type="checkbox"/> Unstable <input checked="" type="checkbox"/> Stable	Conditions to Avoid: Individual cartridges may ignite if the primer is struck or if the cartridge is exposed to excess heat
Incompatibility with Other Substances	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Conditions to Avoid:
Incompatibility (materials to avoid)	Oils, Acids, Alkalies, Ammonia, and other Corrosive materials	
Hazardous Decomposition Products	Oxides of Barium, Lead, Antimony, Aluminum, Magnesium, Nitrogen, Carbon, and Sulfur. Lead and Antimony fumes may also be produced.	

SECTION 6 – HEALTH HAZARDS

Acute	Mild throat, eye and upper respiratory irritation	Chronic	None
Route of Entry	Inhalation, eye contact		
Medical Conditions Aggravated by Exposure	Asthma, or any Respiratory Condition		
Signs & Symptoms of Exposure	Mild throat, eye and upper respiratory irritation		
Carcinogenicity	No	Listed in	None Known
First Aid	Seek attention of any medical problem arises from exposure to this product		
Route of Entry	Inhalation	Inhalation of gases and particulates produced while firing ammunition may result in mild throat, eye and upper respiratory irritation.	
	Eye Contact	Will cause irritation	
	Skin Contact	None	
	Ingestion	Contact Physician	

SECTION 7 – PREVENTIVE MEASURES

Handling & Storage	Store in cool, dry area in the original container to assure performance. Keep out of reach of children. Avoid striking primer, excess heat. Remove ammunition from service if there is evidence of corrosion, physical damage, exposure to oil or spray type lubricants, stored at or above 200 degrees F
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Personal Protective Equipment		Hearing protection is recommended while discharging cartridges.			
Gloves	Not generally required	Eye Protection	Yes Recommend protective eyewear conforming to ANSI Z-87	Protective Clothing	
Ventilation		Local or General Ventilation to meet PEL limits			
Respiratory Protection		Use approved full face respirator or SCBA in conditions exceeding PEL			
Waste Disposal Method		Contact Manufacturer – Product Service			

SECTION 8 – FIRST AID MEASURES

First Aid	Seek attention if any medical problem arises from exposure to this product		
Route of Entry	Inhalation	Remove victim to fresh air, oxygen if needed	
	Eye Contact	Move person to fresh air. If foreign body is suspected, wash eyes in fresh water for 15 minutes, contact physician	
	Skin Contact	Wash with soap and water	
	Ingestion	Contact physician	

SECTION 14 – TRANSPORTATION INFORMATION

Approval #	Product Code	Description	Un Shipping	Hazard
EX2001080051A	ALS1203	Tri-Dent	Cartridges for weapons, inert projectile UN0012	1.4S
EX2001080051A	ALS1204	Hornets Nest 20 Ball	Cartridges for weapons, inert projectile UN0012	1.4S
EX2001080051A	ALS1204HV	Hornets Nest High Velocity	Cartridges for weapons, inert projectile UN0012	1.4S

SECTION 16 – PREPARATION OF MSDS

Prepared By	AMTEC Less-Lethal Systems, Inc.
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