

**Product Commercial Name: "ZETAPI" Centerfire Cartridges with a Leadless Projectile**

## 1. PRODUCT IDENTIFICATION

- 1.1. Product Identification:** Ammunitions with Inert Projectile (Cartridges for Small Arms)
- 1.2. Use of the Product:** Centerfire Ammunitions (Gun/Revolver Cartridges) Heavy Metal Free (ZETAPI) with a Leadless Projectile
- 1.3. Producer:** FIOCCHI MUNIZIONI S.p.A.  
Via Santa Barbara, 4  
23900 LECCO -LC-  
I T A L I A  
Tel.: +39 (0)341 473111  
Fax: +39 (0)341364897  
<http://www.fiocchigfl.it>  
and/or  
FIOCCHI OF AMERICA, INC.  
6930 N. Fremont Road  
Ozark, MO U.S.A. 65721  
Phone: 417-725-4118  
Fax: 417-725-1039  
<http://www.fiocchiusa.com>
- 1.4. Emergency Phone:** +39 (0)341 473111  
800-424-9300 (only for U.S.A.)  
703-741-5000 (only for Canada)

## 2. HAZARDOUS COMPONENT INFORMATION

% (p/p)	Hazardous Ingredient	CEE	EINECS	N° CAS	Symbol	R-Phrase
0÷1	Diazodinitrophenol			87-31-0	E	R2
0÷1	Tetracene			109-27-3	None	None
0÷1	PETN	603-035-00-5	201-084-3	78-11-5	E	R3
0÷1	Potassium Nitrate		231-818-8	7757-79-1	Xn, O	R8-R22-R36/37/38
0÷1	Zirconium	040-001-00-3		7440-67-7	F	R15-R17
0÷1	Aluminum Silicate		235-253-8	12141-46-7	None	None
1÷5	Nitrocellulose	603-037-00-6		9004-70-0	E	R1-R3
0÷1	Nitroglycerine	603-034-00-X		55-63-0	E, T+	R3-R26/27/28-R33
0÷5	Iron		231-096-4	7439-89-6	None	None
50÷65	Tin		231-141-8	7440-31-5	None	None
30÷50	Copper		231-159-6	7440-50-8	None	None
20÷30	Zinc		231-175-3	7440-66-6	F (dust)	R15-R17

***Product Commercial Name: "ZETAPI" Centerfire Cartridges with a Leadless Projectile***

### 3. HAZARDS IDENTIFICATION

**Explosive:** Risk of explosion by shock, friction, fire or other source of ignition.

**Harmful:** Harmful by inhalation and if swallowed. Irritating to eyes, to respiratory system and to skin.



### 4. FIRST AID MEASURES

**Eye Contact:** If affected by particles hold eyelids apart and flush eyes thoroughly with water for 15 minutes at least. If wearing contact lenses, immediately remove lenses. Obtain medical attention immediately.

**Skin Contact:** If affected by particles wash affected area thoroughly with soap and water.

**Ingestion/Absorption:** Immediately contact a physician.

### 5. FIRE HAZARDS

**Particular Hazards in Case of Fire or Explosion:** Risk of explosion by shock. In case of fire or explosion it emits nitrogen oxides, carbon oxide, carbon dioxide.

**Extinguishing Media:** Use water to fight fire. If no water is available, carbon dioxide, dry chemical or earth may be used.

**Not Proper Extinguishing Media:** Any extinguishing media different from those above mentioned.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Care:** Use shovel and broom to pick up. Avoid fire, sparks and any other ignition source; you don't need any particular media except appropriate I.P.D. against metallic sharp-pointed particles.

**Environmental Care:** Do not disperse product in the environment after use.

**Personal Care after Exposure :** There are no medical conditions known to be aggravated by exposure to this product in solid form.

### 7. HANDLING AND STORAGE

**Handling:** Do not smoke during the use of the product. Use ammunitions and in firearms corresponding to regulations in force as far as size and structural characteristics are concerned. If gun fails to fire, remember that delayed fire may occur, or the gun may fire upon being opened. Carefully unload gun after waiting for a few seconds. Do not try to open the cartridge.

**Storage:** Do not smoke in the area where ammunitions are stored. Store them in a cool, dry, well ventilated area away from all sources of ignition. Avoid mechanical impact or shock, electrical discharge, acids, caustics and strong oxidizers.

***Product Commercial Name: "ZETAPI" Centerfire Cartridges with a Leadless Projectile***

## 8. PERSONAL PROTECTION / EXPOSURE CONTROLS

**Engineering Controls:** Local exhaust ventilation is recommended if significant dusting occurs or fumes are generated. Otherwise, use general exhaust ventilation. Use explosion-proof ventilation.

**Eye Protection:** Use safety glasses during firing.

**Skin Protection:** Not normally needed; during firing use gloves.

**Hearing Protection:** Not normally needed; during firing use ear protection.

**Respiratory Tract Protection:** Not normally needed.

**Exposure Limits:** Exposure limits are fixed for each hazardous chemical.

**General Hygiene:** Do not drink, eat or smoke while using this product. Wash hands carefully after having used the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form:** Ammunition with typical shape and colour.

**Physical State:** Solid.

**Solubility in Water at 20°C:** Insoluble.

**Explosion Temperature:** > 130°C

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under normal use conditions. It does not react with water.

**Incompatibility:** Incompatible with acids, strong oxidizers and caustics.

**Decomposition Product:** Carbon monoxide, carbon dioxide, nitrogen oxides.

**Polymerisation:** Will not occur.

**Further Information:** Must be avoided flames, sparks, shock, static, high temperatures (100°C or 212°F, or above).

## 11. TOXICOLOGICAL INFORMATION

The solid state of the product before use doesn't permit the absorption of toxic substances for man.

**Inhalation:** In case of explosion dust, fumes and vapours may cause irritation to nose, throat, upper respiratory tract and lungs. Irritation may cause bronchitis, headache, lowering of blood pressure and weakness.

**Skin Contact:** Dust and fumes may cause allergic reaction in susceptible individuals.

**Eye Contact:** Dust and fumes can irritate the eyes causing redness and discharge.

**Ingestion:** Ingestion may cause severe headache, nausea, vomiting, abdominal pain, fatigue, diarrhoea, trembling, ringing in ear, salivation and, probably, other unknown effects.

## 12. ECOLOGICAL INFORMATION

No data is available on this product about its toxicity towards environment.

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

Do not disperse product in the environment after use: metals can solve and pollute water.

**Degradability:** Not biodegradable.

**Product Commercial Name: "ZETAPI" Centerfire Cartridges with a Leadless Projectile**

### 13. DISPOSAL CONSIDERATION

Discarded ammunitions must be placed in their original boxes and then sent to destruction. Do not dump into sewers, on the ground, or into any body of water. Contact a firm properly designed for thermo destruction of ammunitions. Disposal must be in accordance with applicable local, state and federal laws and regulations.

### 14. TRANSPORTATION INFORMATION

	IMDG CODE	RID/ADR CODE	IATA RESTR. ART.	RINA CLASS
CLASS	1	1	CARTRIDGES FOR WEAPONS, INERT PROJECTILE (Cartridges, small arms) Article N°132	CLASS 1  1.62
DIVISION	1.4	0012		
COMPATIBILITY GROUP ITEM	S	1.4 S 39		
UN N°	0012			
PAGE	1234			

### 15. REGULATORY INFORMATION

**Danger Symbols:** E Explosive  
Xn Harmful

**R Phrase:** R2 Risk of explosion by shock, friction, fire or other sources of ignition.  
**R Phrase:** R20/22 Harmful by inhalation and if swallowed.  
**R Phrase:** R33 Danger of cumulative effects.  
**R Phrase:** R36/37/38 Irritating to eyes, to respiratory system and to skin.  
**S Phrase:** S2 Keep out of the reach of children.  
**S Phrase:** S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
**S Phrase:** S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible.)  
**S Phrase:** S28 After contact with skin, wash immediately with plenty of soap-suds.

Classification according to:

- Decreto Legislativo n.285 del 16 luglio 1998
- Decreto 14 giugno 2002: Recepimento della direttiva 2001/59/CE recante XXVIII adeguamento della direttiva 67/548/CEE.
- Decreto Legislativo n.272 del 19 settembre 2002.

***Product Commercial Name: "ZETAPI" Centerfire Cartridges with a  
Leadless Projectile***

**16. OTHER INFORMATION**

## Bibliography:

N. Irving Sax: "DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS", Reinhold Publishing Corporation, New York, U.S.A.

The information contained in this M.S.D.S. should be provided to all who will use, handle, store, transport, or otherwise be exposed to this product.

Fiocchi Munizioni S.p.A. believes this information to be reliable and current as of the date of publication, but makes no warranty that it is.

This M.S.D.S. is applicable only to the product identified herein and only when used properly.

For U.S.A. and Canada only: for additional information, please contact:

FIOCCHI OF AMERICA, INC

6930 N. Fremont Road

Ozark, MO, U.S.A. 65721

Phone: 417-725-4118

Fax: 417-725-1039

<http://www.fiocchiusa.com/>

Date of the present edition: 2008.03.04