

**SPORTING CARTRIDGES FOR SMOOTH-BORE
BARREL WEAPONS**

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 PRODUCT IDENTIFIER

Commercial Name: **SPORTING CARTRIDGES FOR SMOOTH-BORE BARREL WEAPONS.**

CALIBRO 12	
ALL BLACK 24 G	(P.N. CMBOR B324*)
ALL BLACK 28 G	(P.N. CMBOR B328*)
EXTREME 24 G	(P.N. CMBOREB424*)
EXTREME 28 G	(P.N. CMBOREB428*)
SUMMA 24 G	(P.N. CMBORMB424*)
SUMMA 28 G	(P.N. CMBORMB428*)
STAR 24 G	(P.N. CMBORSB424*)
STAR 28 G	(P.N. CMBORSB428*)
STAR BIOR 24 G	(P.N. CMBORSB424F*)
STAR BIOR 28 G	(P.N. CMBORSB428F*)
PAPER 24 G	(P.N. CMBORPB424*)
PAPER 28 G	(P.N. CMBORPB428*)
SPORT 24 G	(P.N. CMBORSB224*)
SPORT 28 G	(P.N. CMBORSB228*)
SPORT SLUG 28 G	(P.N. CMBOR B2PALLA)
SPORT BIOR 28 G	(P.N. CMBORFB228*)
SPORTING SHORT 28 G	(P.N. CMBORHB328*)
SPORTING MEDIUM 28 G	(P.N. CMBORMB328*)
SPORTING LONG 28 G	(P.N. CMBORLB328*)
PIGEON 36 G	(P.N. CMBORPB436*)
ZZ BIRD 32 G	(P.N. CMBOR B432*)
ZZ PAPER 32 G	(P.N. CMBORZB432*)
ITA TRAINING 24 G	(P.N. CMBORTB324*)
ITA TRAINING 28 G	(P.N. CMBORTB328*)
ITA 24 G	(P.N. CMBORTB424*)
ITA 28 G	(P.N. CMBORTB428*)
SUBSOUND 24 G	(P.N. CMBORBB224*)
SUBSOUND 28 G	(P.N. CMBORBB228*)
SPORT CAS	(P.N. CMBORSB224C*)
SUMMA SKEET 24 G	(P.N. CMBORBMB324S*)
CAESAR 24 G	(P.N. CMBORCB424*)
CAESAR 28 G	(P.N. CMBORCB424*)
BIOR 30 G	(P.N. CMBORFB230*)
GAME 30 G	(P.N. CMBOR B230*)
GM3 32 G	(P.N. CMBOR3B232*)
S4 32 G	(P.N. CMBOR4B232*)
BIOR 32 G	(P.N. CMBORFB232*)
SPECIAL 32 G	(P.N. CMBORSB232*)
SUPER 34 G	(P.N. CMBOR B334*)
DISPERSANTE 34 G	(P.N. CMBORDB334*)
ROYAL 36 G	(P.N. CMBORRB436*)
SEMI MAGNUM 40 G	(P.N. CMBOR B440*)
MAGNUM 50 G	(P.N. CMBOR B550*)
PIGEON 36 G	(P.N. CMBORPB436*)
PIGEON PAPER 36 G	(P.N. CMBORGB436*)
FELTRO 33 G	(P.N. CMBORFB333*)
FELTRO 36 G	(P.N. CMBORFB436*)
PELLETS 2/0 36 G	(P.N. CMBOR B402/0*)


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<i>PELLETS 4/0 36 G</i>	<i>(P.N. CMBOR B404/0*)</i>
<i>PELLETS 7/0 36 G</i>	<i>(P.N. CMBOR B407/0*)</i>
<i>9 PELLETS 33 G</i>	<i>(P.N. CMBOR B411/0)</i>
<i>9 PELLETS CU 33 G</i>	<i>(P.N. CMBOR B411/0R)</i>
<i>SLUG 32 G</i>	<i>(P.N. CMBOR B4SLUG)</i>
<i>EXTRA MIGRATORIA 33 G</i>	<i>(P.N. CMBOREB333*)</i>
<i>EXTRA MIGRATORIA 31 G</i>	<i>(P.N. CMBOREB331*)</i>
<i>EXTRA 35 G</i>	<i>(P.N. CMBOREB435*)</i>
<i>EXTRA 38 G</i>	<i>(P.N. CMBOREB438*)</i>
<i>DELUXE 28 G</i>	<i>(P.N. CMBORLB228*)</i>
<i>DELUXE 32 G</i>	<i>(P.N. CMBORLB232*)</i>
<i>DELUXE 34 G</i>	<i>(P.N. CMBORLB234*)</i>
<i>DELUXE 36 G</i>	<i>(P.N. CMBORLB236*)</i>
<i>DELUXE 40 G</i>	<i>(P.N. CMBORLB240*)</i>
CALIBRO 16	
<i>GAME 30 G</i>	<i>(P.N. CMBOR B630*)</i>
CALIBRO 20	
<i>EXTRA 32 G</i>	<i>(P.N. CMBOREB932*)</i>
<i>EXTRA 30 G</i>	<i>(P.N. CMBOREB930*)</i>
<i>EXTRA 28 G</i>	<i>(P.N. CMBOREB929*)</i>
<i>GAME BIOR 25 G</i>	<i>(P.N. CMBOR B825*)</i>
<i>EXTRA 28 G</i>	<i>(P.N. CMBOREB928*)</i>
<i>SEMI MAGNUM 32 G</i>	<i>(P.N. CMBOR B932*)</i>
<i>FELT 30 G</i>	<i>(P.N. CMBORFB930*)</i>
<i>TWENTY 24 G</i>	<i>(P.N. CMBOR B924*)</i>
<i>TWENTY 28 G</i>	<i>(P.N. CMBOR B928*)</i>
<i>20 PALLA</i>	<i>(P.N. CMBOR B9PALLA2*)</i>
CALIBRO 28	
<i>EXTRA 21 G</i>	<i>(P.N. CMBOR B028*)</i>
<i>SEMIMAGNUM 28 G</i>	<i>(P.N. CMBOR3B028*)</i>
CALIBRO 410	
<i>EXTRA 14 G</i>	<i>(P.N. CMBOR B036*)</i>
<i>MAGNUM 19 G</i>	<i>(P.N. CMBOR B041*)</i>
<i>SILENZIATA36 12 G</i>	<i>(P.N. CMBORSB036*)</i>
<i>SILENZIATA410 25 G</i>	<i>(P.N. CMBORSB03622*)</i>
CALIBRO 12 SPECIAL	
<i>STAR 28</i>	<i>(P.N. CTBORSB428*)</i>
<i>STAR 32</i>	<i>(P.N. CCBORSB432*)</i>
<i>STAR 28</i>	<i>(P.N. CTBOR B128*)</i>
<i>STAR 28</i>	<i>(P.N. CTBOR B228*)</i>
<i>STAR 28</i>	<i>(P.N. CTBOR B328*)</i>
<i>STAR 32</i>	<i>(P.N. CCBOR B232*)</i>
<i>SPORT 28</i>	<i>(P.N. CTBORSB128*)</i>
CALIBRO 20 SPECIAL	
<i>STAR 28</i>	<i>(P.N. CTBORSB928*)</i>
CALIBRO 410 SPECIAL	
<i>STAR 410</i>	<i>(P.N. CMBORSB036*)</i>
CALIBRO 28 SPECIAL	
<i>STAR 28</i>	<i>(P.N. CCBORSB028*)</i>

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Shooting cartridges.

It is not recommended for any other purpose not listed above.

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1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Supplier *Cheddite Italy Srl con socio unico*
Street address *Via del Giaggiolo 189*
I-57124 Livorno
Telephone number 0586 854295 Internazionale: +39 0586 854295
Telefax 0586 854393 Internazionale: +39 0586 854393
Internet Site www.chedditeitaly.com
E-mail address of competent person responsible for the SDS: infoSDS@chedditeitaly.it

1.4 EMERGENCY TELEPHONE NUMBER:

For Chemical Emergency, Spill, Leak, Fire, Exposure or Accident Call CHEMTREC Day or Night
DOMESTIC NORTH AMERICA 800-424-9300

SECTION 2: Hazards identification

2.1 CLASSIFICATION OF THE ARTICLE


2.1.1 Classification according to Regulation (EC) n.1272/2008 [CLP]

Fire or projection hazard, H204

2.1.2 Classification according to Directive 67/548/CEE and 1999/45/CE

N.d.

2.2 LABEL ELEMENTS

<u>Hazard pictograms</u>	
<u>Signal word</u>	Attention
<u>Hazard statement</u>	H204 Fire or projection hazard.
<u>Precautionary Statements</u>	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

2.3 OTHER HAZARDS

Do not swallow.


Item has not been environmentally tested.

According to Art.3 of Regulation 1272/2008, blank cartridges are classified as articles containing articles containing mixtures, as shown below:

- *Propellant: mixture;*
- *Primer cap: article containing mixture;*
- *Empty case: article containing articles containing mixture;*
- *Loading: articles containing mixture.*

Hazardous substances are hermetically sealed within the product. Therefore, under normal conditions in terms of use and handling of the product, no exposures to hazardous substances can occur.

Articles unburned involved in a fire: DO NOT REUSE OR STORE WITH OTHER PRODUCTS. The product should be destroyed following the procedures outlined in the following § 13.

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The product has a low risk of explosion in the event of ignition or initiation. Effects are confined inside the package and give no projection of fragments of appreciable size or range. An external fire will not cause an explosion of the entire package content.

The product is packaged and designed in such a way that all the dangerous effects following the accidental ignition are confined within the package, provided that the package has not been degraded by fire. In any case, all the projection or shockwave effects are to the point of not impede or block the firefighter's intervention in the immediate vicinity of the package.

SECTION 3: Composition/information on ingredients

3.1 SUBSTANCES


N.a.

3.2 MIXTURES

3.2.1 Mixture in the cartridge

The propellant is a smokeless powder loaded in the cartridge in an amount between 0.50 g ÷ 2.30 g. composition:

EC No	CAS No	Name	%[weight]	Classification according to Regulation (EC) n.1272/2008 (CLP)
-	9004-70-0	Nitrocellulose (containing N > 12,6%)	>48,0	Expl. 1.1 H201
200-240-8	55-63-0	Glycerol trinitrate	0,0 ÷ 50,0	Unst. Expl. H200 Acute Tox. 2 H300 Acute Tox. 2 H310 Acute Tox. 2 H330 STOT Rep. Exp. 2 H373 Aquatic Chronic 2 H411
201-645-2	85-98-3	Centralite ⁽¹⁾	0,0 ÷ 3,5	Acute Tox. 4 H302 Aquatic Chronic 3 H412
201-55-74	84-74-2	Dibutyl phthalate	0,0 ÷ 2,2	Repr. 2 H360 Aquatic Acute 1 H400
204-539-4	122-39-4	Diphenylamine	0,0 ÷ 2,0	Acute Tox. 3 H301 Acute Tox. 3 H311 Acute Tox. 3 H331 Eye Irrit. 2 H319 STOT Rep. Exp. 2 H373 Aquatic Acute 1 H400

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EC No	CAS No	Name	%[weight]	Classification according to Regulation (EC) n.1272/2008 (CLP)
231-818-8	7757-79-1	Potassium Nitrate ⁽¹⁾	0,0 ÷ 0,5	Oxid. Solid 3 H272

(1)- This substance is not classified in the Annex VI to Regulation (EC) n.1272/2008


3.2.2 Mixtures contained in the articles composing the cartridge.

Burning mixture in the trigger capsule

The trigger capsule is loaded with 0,050 g ÷ 0,065 g of burning mixture of the following composition:

EC No	CAS No	Name	%[weight]	Classification according to Regulation (EC) n.1272/2008 (CLP)
239-290-0	15245-44-0	Lead Styphnate	33 ÷ 50	Unst. Expl. H200 Acute Tox. 4 H302; H332 Repr. Tox. 1A H360 STOT Rep. Exp. 2 H373 Aquatic Chronic 1 H410; Aquatic Acute 1 H400
233-020-5	10022-31-8	Barium Nitrate	25 ÷ 45	Ox. Sol. 2; H272 Acute Tox. 4 H302; H332 Eye Irrit. 2; H319
215-713-4	1345-04-6	Antimony sulfide ⁽¹⁾	0 ÷ 25	Carc. 2 H351 Aquatic Chronic 3 H412 Repr. 1A H360
203-659-4	109-27-3	Tetrazene	3 ÷ 6	Unst. Expl. H200
231-072-3	7429-90-5	Aluminium Powder (pyrophoric)	0 ÷ 6	Flam. Solid 1 H228 Water React. Flam. Gas 2 H261
231-175-3	7440-66-6	Zinc Powder (pyrophoric)	0 ÷ 6	Pyr. Solid 1 H250 Water React. Flam. Gas 1 H260 Aquatic Acute 1 H400 Aquatic Chronic 1 H410

(1)- This substance is not classified in the Annex VI to Regulation (EC) n.1272/2008. Newly generated substance specific hazard data do not support the harmonised classification and labelling for this antimony compound as stated in Annex VI of regulation (EC) 1272/2008. Therefore, an alternative proposal for the classification and labelling of antimony sulphide (representative sample) is provided as well.

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Loading

Loading is made of pellets or balls or buckshot made of antimonial lead and its weight varies from 12 g ÷ 57 g.

EC No	CAS No	Name	%[weight]	Classification according to Regulation (EC) n.1272/2008 (CLP)
231-100-4	7439-92-1	Lead	> 95	Acute Tox. 4 H332 Aquatic Chronic 1 H410 Aquatic Acute 1 H400
231-146-5	7440-36-0	Antimony ⁽¹⁾	< 8	-
231-148-6	7440-38-2	Arsenic	0,2 – 0,5	Acute Tox. 3 H301 Acute Tox. 3 H331 Aquatic Chronic 1 H410 Aquatic Acute 1 H400

(1)- Antimony powder is not legally classified as laid down in Annex VI of Regulation (EC) n.1272/2008 [CLP]

Additional information:

For full text of P-statements and H-phrases: see SECTION 16

SECTION 4: First aid measures

4.1 DESCRIPTION OF FIRST AID MEASURES

General notes: *interventions refer to an unlikely accidental contact with the mixtures present within the article or with the fumes which develop after the shot. Upon occurrence of significant levels of contamination, remove immediately the cause of exposure, ensure that people involved are in a protected, well ventilated and warm area. Search for medical assistance.*

Following inhalation: *In case of inhalation of the product, allow to breathe fresh air.*

Inhalation of fumes generated by the combustion/deflagration of powders can cause irritation to the respiratory tract and nasal passages, coughing and breathing difficulty. If such symptoms occur immediately move the individual from the exposure place to open air. If the exposed person should demonstrate any breathing difficulties administer oxygen. In case of respiratory arrest, administer artificial respiration, keep the affected person warm and rested.


There is a risk of pulmonary edema as a delayed effect of this exposure. Search for medical assistance. If any symptom of poisoning by carbon monoxide (CO) and / or nitrogen oxides (NOx) is experienced, such as nausea, fatigue, confusion and fainting: call a doctor and remain under medical observation for at least 48 hours. There are specific emergency medical procedures for poisoning by carbon monoxide (CO) and / or nitrogen oxides (NOx).

If the temperature reached during the fire exceeds 400 ° C toxic and irritating fumes and vapors containing LEAD can generate.

Following skin contact: *wash with plenty of soap and water. If required, immediately remove contaminated clothing and/or footwear.*

Following eye contact: *gently wash with plenty of cool water for at least 15 minutes and consult a specialist.*

Following ingestion: *do not induce vomiting and contact a doctor.*

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Following burns: immediately cool the area of affected skin with fresh water as long as possible. Do not remove clothing stuck to the skin. Contact a specialist centre for burns treatment.

Following injuries caused by accidental detonation: immediately lead the injured person to the closest hospital emergency room.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

General notes: The main symptoms, both acute and delayed are linked to the prolonged exposure to some of the substances composing the mixture or to the explosion's fumes. It is unlikely that the amount of particles which someone might be exposed to following the firing of a cartridge, can be sufficient to cause some of these effects.

Inhalation: the inhalation of powder may cause irritation of the respiratory tract. Exposure to fumes from detonation can cause nausea, fatigue, confusion and fainting. It can also cause irritation to the respiratory system, bronchitis, bronchopneumonia and, in severe cases over a period of 24 hours, acute pulmonary edema and death.

Skin contact: possible irritation after contact with the product.

Eye contact: can cause irritation.

LEAD: Ingestion of large amounts of lead can cause abdominal pain, constipation, cramps, nausea and / or vomiting. Chronic lead exposure can cause damage to kidneys, anemia, fertility problems can cause damage in the early stages of development, cause permanent damage to the nervous system in humans and damage, even, to the cognitive function.

ARSENIC: Epidemiological studies in humans have shown an association between the increased incidence of lung and skin cancer and prolonged exposure to high concentrations of arsenic. Arsenic is classified as a known carcinogen.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

It is advisable to consult a doctor in any of the cases reported in § 4.1

SECTION 5: Firefighting Measures

5.1 EXTINGUISHING MEDIA

SUITABLE extinguishing media: water spray, CO₂, dry chemical powder.

If the fire reaches the product, withdraw and let the fire burn.

UNSUITABLE extinguishing media: none.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

When thermal decomposition occurs, irritating or poisonous vapors and gases can be released. CO, CO₂ and Nitrogen Oxides (NO_x) can be produced.

If the temperature reached during the fire exceeds 400 ° C toxic and irritating fumes and vapors containing LEAD can generate.

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5.3 ADVICE FOR FIREFIGHTERS

In case of fire in a warehouse, evacuate the area and keep the staff out of the hazardous area. Maintain a safe distance of at least 300m

*If the fire directly involves the product, DO NOT ATTEMPT TO EXTINGUISH FIRE, let it burn while cooling the surroundings, keep at a safe distance and immediately protect operators using any adequate shield, **RISK OF EXPLOSION**. Approach only after being absolutely sure that the fire is extinguished. After extinguishing the fire, keep the residue wet and monitor the area for at least 6 hours. Do not touch any projected product or substance without the required Individual Protective Devices.*

Avoid inhaling fumes produced by the fire.

Only if the fire has not yet attacked the product, try to extinguish it by any available mean, soak the product in water in order to cool and if possible remove the powder from the danger zone.

In case of fire, use normal firefighting equipment: breathing apparatus and protective clothing.

The removal and destruction of articles exposed to fire is for the expert.

SECTION 6: Accidental Release Measures

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

For non-emergency personnel

- Don't smoke.
- Reach a safe area.

For emergency responders

- Isolate the area for a safe distance of about 300m. In this area remove any source of ignition.
- Prevent access by unauthorized persons and the movement of vehicles in the contaminated area.
- Respect the safety measures regarding the handling of explosives.
- Avoid direct contact with the product. Always work with the appropriate individual protective devices in compliance with what prescribed in § 8.

6.2 ENVIRONMENTAL PRECAUTIONS

In case of accidental release of product is not required the presence of a specialized Emergency Team. In case of a large quantity release and the product comes in contact with a stream or a sewer, inform the responsible authorities.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Indication for the containment

In order to reduce the risk of fire, soak the leaked product with water, caring not to involve waste waters conducts. Collect the product manually using non-sparking tools and put it into containers which are properly labelled and in compliance with what prescribed in § 14. Do not use electrical appliance to collect the product. For disposal, follow the instructions contained in § 13 below. Should any particular difficulties arise, contact the Cheddite Italy Srl technical assistance service.

6.4 REFERENCE TO OTHER SECTIONS

Information on personal protection and disposal is given in Sections 8 e 13.

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SECTION 7: **Handling and Storage**

General notes: *the product is subject to the regulatory restrictions dictated for the handling and storage of explosives, which the user must be aware of and apply.*

7.1 **PRECAUTIONS FOR SAFE HANDLING**

- *Don't smoke.*
- *Keep the product away from sources of heat, flames, sparks and electrostatic discharge.*
- *Do not use any electrical appliance near the product.*
- *Avoid shock and friction.*
- *Avoid contact with incompatible materials; see § 10 below.*
- *Limit the possible manipulation of damaged products to the securing operations as described in § 6.3.*
- *Do not eat or drink in the room where the product is being handled.*


7.2 **CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES**

- *Don't smoke.*
- *Store the product away from heat sources, flames, sparks and electrostatic discharge.*
- *Avoid rough handling.*
- *Store in areas that are sufficiently fresh, dry and ventilated, with interiors protected from direct sunlight. Storage temperature should be maintained between -20°C and + 25°C. The relative humidity should be maintained between 30 and 75%.*
- *Clean storage area and keep product away from other flammable material.*
- *Do not store with other incompatible hazardous materials inside the same storage area.*
- *Do not exceed the storage capacities prescribed for each storage area.*
- *Remove any faulty, altered or incomplete packaging.*
- *Do not refill or empty the packaged product in the storage area.*
- *Stack the packaged product in a stable manner.*
- *Do not exceed the stacking height provided by the regulations in force and do not in any case exceeds a height of 3 m above the floor when stacking the product.*
- *Always use the homologated packaging prescribed in § 14 below within the limits of the maximum admissible gross load indicated on it.*

7.3 **SPECIFIC END USE(S)**

Do not use for purposes other than those listed in § 1.2.

The user must select appropriate ammunition for rifles that must be kept in proper operating condition. Do not use these cartridges for rifles that have damasked steel or twisted barrels, or chambers shorter than the length of the cartridge as indicated on the box. If unsure, check with the rifles manufacturer. Before loading the gun, make sure the barrel is not obstructed and in particular check that the in barrel there is no cartridge of a smaller calibre. Use only cartridges in good condition and undamaged.

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SECTION 8: Exposure controls/personal protection

8.1 CONTROL PARAMETERS

8.1.1 National limit values

Occupational exposure limits values: *Not defined by Italian law.*

Mixture Hazardous component:

Hazardous component	CAS No	TLV – TWA (8 hours)
Aluminium Powder (pyrophoric)	7429-90-5	1 mg/m ³
Antimony	7440-36-0	0,5 mg/m ³
Arsenic	7440-38-2	0,01 mg/m ³
Centralite I *	85-98-3	Not defined
Dibutyl phthalate	84-72-2	5 mg/m ³
Diphenylamine	122-39-4	10 mg/m ³
Barium Nitrate	10022-31-8	Not defined
Potassium Nitrate	7757-79-1	Not defined
Nitrocellulose (containing N > 12,6%)	9004-70-0	Not defined
Glycerol trinitrate	55-63-0	(cute) 0,46 mg/m ³
Lead	7439-92-1	0,05 mg/m ³
Antimony sulfide	1345-04-6	Not defined
Lead Styphnate	15245-44-0	Not defined
Tetrazene	109-27-3	Not defined
Zinc Powder (pyrophoric)	7440-66-6	Not defined

Exposure limits values from ACGIH American Conference of Governmental Industrial Hygienists 2014.

8.1.2 Information on monitoring procedures

None appropriate exposure control measure is required.

The clinical and biological monitoring is the prerogative of the physician responsible.

8.2 EXPOSURE CONTROLS

General notes

When shooting, it is recommended to ventilate the premises if significant amounts of fumes or dust are generated.

Hygienic measures to prevent exposure:

Observe the following hygienic measures:

- *don't eat and drink while handling substances.*
- *After handling, wash hands carefully with soap and water.*
- *Remove work clothing / personal protective equipment contaminated before leaving the work.*

8.2.1 Personal protection equipment

Eye and face protection:

Use safety glasses with side protection and shatterproof lenses.

Hearing Protection:


Use earmuffs when shooting.

Respiratory protection:

Not necessary in ventilated environments.

In environments not ventilated use a mask with P2 protective filter.

In environments where there has been a fire or an explosion use a self-respirator.

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SECTION 9: **Physical and chemical properties**

9.1 **INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

Physical state	<i>Solid</i>
Odour	<i>Odorless</i>
Colour	<i>Case blue, burgundy, black, gold, green, red, silver, transparent or yellow, with golden base.</i>
Form	<i>Plastic or fiber cylinder with metal bottom</i>
Dimensions, mm	<i>12.08.70, 12.12.60, 12.12.70, 12.16.70, 12.16.76, 12.16.89, 12.20.70, 12.25.70</i>
Thickness, mm	<i>not applicable</i>
Gravimetric density, g/dm ³	<i>not applicable</i>
Calorific Power, cal/g	<i>not applicable</i>
Self-ignition temperature	<i>> 130° C</i>
Solubility in Water	<i>Insoluble</i>
Solubility in other solvents	<i>Insoluble</i>
Properties of explosive materials	<i>Explosive</i>

9.2 **OTHER INFORMATION**

N.d.

SECTION 10: **Stability and Reactivity**

10.1 **REACTIVITY**

The mixture containing oxidizing substances and combustible materials, and has a high reactivity to external sources of ignition.

10.2 **CHEMICAL STABILITY**

The product is stable under the handling and storage conditions recommended in the Section 7.

10.3 **POSSIBILITY OF HAZARDOUS REACTIONS**


Under severe and unusual conditions of strong confinement or in case it is punctured or seriously damaged the cartridge can explode.

If the mixture comes in contact with ignition sources, the combustion reaction would proceed at high speed developing high amounts of heat, gases and fumes containing hazardous decomposition products.

10.4 **CONDITIONS TO AVOID**

As listed in §7, the mixture can't come into contact with sources of ignition:

- *Flames or sources of heat*
- *Sparks*
- *Electrostatic discharge*
- *Friction*

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- Shock

10.5 INCOMPATIBLE MATERIALS

Alkalis and acids, amines, flammable, strong oxidizing.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

*CO, CO₂ and Nitrogen oxides (NO_x), Metal Oxides and Sulphur Dioxide (SO₂).
If the temperature reached during the fire exceeds 400 ° C toxic and irritating fumes and vapors containing LEAD can generate.*

SECTION 11: Toxicological information

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

The physical nature of this product makes unlikely the absorption because all harmful and toxic substances coming from the primer, the powder and the load are contained within the cartridge. A minimal amount of inhalable particles can be generated when the cartridge is fired.

SECTION 12: Ecological information

12.1 TOXICITY

N.a.

12.2 PERSISTENCE AND DEGRADABILITY

Not biodegradable. The loading can fragment and decompose in soil leading to a local lead accumulation.

12.3 BIOACCUMULATIVE POTENTIAL

N.a.

12.4 MOBILITY IN SOIL

Lead released into the environment during the process of degradation of the load can migrate in the soil.

12.5 RESULTS OF PBT AND VPVB ASSESSMENT

N.a.


12.6 OTHER ADVERSE EFFECTS

N.a.

SECTION 13: Disposal considerations

13.1 WASTE TREATMENT METHODS

The product should be used with caution in order to avoid environmental contamination and must not be dumped. It must be collected for disposal according to § 6 and stored in a location under custody as indicated at § 7. Destroy by incineration exclusively in sites authorised for the disposal of explosives. Do not mix with other incompatible waste products (see § 10).

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The user has the responsibility to return to a special facility unused items (Expired or damaged), empty containers recovered after use and packaging in compliance with all local laws and regulations and national regulations regarding waste material of hazardous substances. In case of difficulties, contact the Cheddite Italy Srl technical assistance service.

13.1.1 Packaging disposal

If it is in perfect conditions and properly preserved, it may be reused to package an identical product. Otherwise, treat it in the same way as waste and residues as indicated in the preceding § 13.1.

13.1.2 European catalogue of wastes

16 04 01 Waste ammunition.*

SECTION 14: Transport Information

14.1 UN NUMBER

0012

14.2 NAME AND DESCRIPTION

CARTIRDGES, SMALL ARMS

14.3 CLASSIFICATION BASED ON "RECOMMENDATIONS ON THE TRANSPORT OF DANGEROUS GOODS - MODEL REGULATIONS"

- Class: 1
- Division: 1.4
- Compatibility Group: S

14.4 ADR

- Transport category 4
- Exemptions related to quantities carried per transport unit § 1.1.3.6 *Unlimited*
- Exemptions related to dangerous goods packed in limited quantities § 3.4. *5kg*
Marking for limited quantities § 3.4.



- Tunnel restriction code
- Mixed loading

E
Mixed loading NOT permitted with packages containing substances or articles of Class:
 4.1 + 1
 5.2 + 1
 1A e 1L
 1.4A e 1.4L
 1.5A e 1.5L
 1.6A e 1.6L

14.5 RID

- Nomenclature Harmonisée Marchandises 930630
- Transport category 4
- Exemptions related to quantities carried per transport unit § 1.1.3.6 *Unlimited*
- Exemptions related to dangerous goods packed in limited quantities § 3.4. *5kg*
Marking for limited quantities § 3.4.



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- Mixed loading

*Mixed loading NOT permitted with
packages containing substances or
articles of Class:*

4.1 + 1
5.2 + 1
1A e 1L
1.4A e 1.4L
1.5A e 1.5L
1.6A e 1.6L

14.6 IMDG CODE

- EmS *F-B, S-X*
- Stowage and Segregation *Category 01*
- Exemptions related to dangerous goods packed in limited quantities § 3.4. *5kg*
Marking for limited quantities § 3.4.



14.7 IATA

- ERG Code
- Etichette di pericolo:

3L



14.7.1 PASSENGER & CARGO AIRCRAFT

Maximum permissible net mass per transport unit

kg 25

14.7.2 CARGO AIRCRAFT ONLY

Maximum permissible net mass per transport unit

Kg 100

14.8 PACKING INSTRUCTIONS

The propellant must be packaged according to that prescribed by definition P130

14.8.1 External packaging

Description of external packaging 4G fibreboard boxes

PACKAGING for gauge 12 and for
250 pcs.

Marking UN 4G/Y13/S/(year of manufacture)/I/RINA/CH 25012

Transport admission certificate 2016-LI-01-89-07

Marking UN 4G/Y15,0/S/(year of manufacture)/I/RINA/CH 25012 N

Transport admission certificate 2016-LI-01-89-25

Packaging for gage16 and for 500 pcs.

Marking UN 4G/Y19/S/ (year of manufacture) I/RINA/CH 50016

Transport admission certificate 2016-LI-01-89-10

Packaging for gage20 and for 200 pcs.

Marking UN 4G/Y15,5/S/ (year of manufacture) I/RINA/CH 20020

Transport admission certificate 2016-LI-01-89-17

Packaging for gage20 and for 250 pcs.

Marking UN 4G/Y15/S/ (year of manufacture) I/RINA/2013 LI 01 529/20250 SC

Transport admission certificate 2013/LI/01/529

Packaging for gage28 and for 250 pcs.

Marking UN 4G/Y19/S/ (year of manufacture) I/RINA/CH 25028

Transport admission certificate 2016-LI-01-89-20

Packaging for gage410 and for 250 pcs.

Marking UN 4G/Y19/S/ (year of manufacture) I/RINA/CH 25036

Transport admission certificate 2016-LI-01-89-22

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14.8.2 Internal packaging

*Not required.
If used it will be fibreboard boxes.*

SECTION 15: Regulatory information

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

Italian Legislation

PS Category

V – gruppo A /1.4S

Recognition certificate:

Law n° 509 dated December 6, 1993

European Legislation

The product is not subjected to articles 9, 10, 11 of the Directive 1999/45/CE dated 31.05.1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations.

International rules:

The product complies with the technical regulations CIP XV - 7 established by the "Commission Permanent International pour l'épreuve des armes à feu portatives (CIP)"

Approval certificate:

Prot N ° 210/BAL - AG / vp

Date:

29 October 2010


15.2 CHEMICAL SAFETY ASSESSMENT

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

16.1 ABBREVIATIONS AND ACRONYMS

<i>N.a.</i>	<i>Not available.</i>
<i>SNPE</i>	<i>Italian Society of Powder and Explosives.</i>
<i>ADR</i>	<i>Agreement concerning the international carriage of Dangerous goods by Road.</i>
<i>RID</i>	<i>Règlement concernant le transport International ferroviaire des marchandises Dangereuses.</i>
<i>IMDG</i>	<i>International Maritime Dangerous Goods Code.</i>
<i>IATA</i>	<i>International Air Transport Association.</i>
<i>TLV-TWA</i>	<i>Threshold Limit Value - Time Weight Average (8 h).</i>
<i>LD₅₀</i>	<i>Lethal Dose to 50% of a test population (Median Lethal Dose).</i>
<i>EC₅₀</i>	<i>Half maximal effective concentration.</i>
<i>PBT</i>	<i>Persistent Bioaccumulative and Toxic.</i>
<i>vPvB</i>	<i>very Persistent very Bioaccumulative.</i>

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16.2 MAIN REGULATORY SOURCES

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Directive 67/548/CEE 2. Directive 76/769/CEE 3. Directive 90/394/CEE 4. Directive 1999/45/CE 5. Directive 2001/58/CE 6. Directive 2001/59/CE 7. Decision 2001/118/CE 8. Directive 2003/34/CE 9. Directive 2004/37/CE 10. D.P.R. 10 Settembre 1982, n. 904 11. D. M. 12 Agosto 1998 12. D. L. 25/02/2000, n. 66 13. Ministero della Salute-Decreto 14/06/02 | <ol style="list-style-type: none"> 14. Ministero della Salute-Decreto 7/09/2002 15. D. L. 14 Marzo 2003, n. 65 16. Ministero dell'Interno-Decreto 28/02/2006 17. Regulation (CE) No 1907/2006 REACH 18. Regulation (CE) n. 1272/2008 CLP 19. D. L. 9 Aprile 2008, n. 81 20. ADR2015 21. RID2015 22. IMDG Code Ed.36 23. IATA ed. 57 24. Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Fifth revised edition United Nations, 2013 |
|---|---|

16.3 KEY LITERATURE REFERENCES AND SOURCES FOR DATA

1. ECHA European Chemicals Agency
2. "Guidance on the compilation of safety data sheets" versione 1.1-Dicembre 2011, ECHA
3. "Guidance on Labelling and Packaging in accordance with Regulation (EC) No 1272/2008", ECHA
4. American Conference of Governmental Industrial Hygienists (ACGIH)
5. CEFIC Emergency Response Intervention Cards
6. European Chemicals Bureau (ECB)
7. GESTIS - Substance Database The information system on hazardous substances of the Berufsgenossenschaften (German institutions for statutory accident insurance and prevention)
8. IARC International Agency for Research on Cancer
9. International Chemical Safety Cards (WHO-IPCS-ILO)
10. National Institute for Occupational Safety and Health (NIOSH) - Registry of Toxic Effects of Chemical Substances (RTECS).

16.4 CLASSIFICATION AND PROCEDURE USED TO DERIVE THE CLASSIFICATION FOR MIXTURES ACCORDING TO REGULATION (EC) 1272/2008 [CLP]

For classification according to Regulation (EC) 1272/2008 [CLP] the Rating issued by the Category Association of European weapons and civil and sporting ammunition factories has been followed.

16.5 H-PHRASES AND/OR P-STATEMENTS (NUMBER AND FULL TEXT)

Hazard statement

Mixture in the article

- | | |
|--|--|
| <ol style="list-style-type: none"> H200 H272 H300 H301 H302 H310 H311 H319 H330 | <ol style="list-style-type: none"> Unstable explosive. May intensify fire; oxidizer. Fatal if swallowed. Toxic if swallowed. Harmful if swallowed. Fatal in contact with skin. Toxic in contact with skin. Causes serious eye irritation. Fatal if inhaled. |
|--|--|

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- H331 Toxic if inhaled.*
H360 May damage fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Mixtures contained in the items composing the cartridge not mentioned above

- H228 Flammable solid.*
H250 Catches fire spontaneously if exposed to air.
H260 In contact with water releases flammable gases which may ignite spontaneously.
H261 In contact with water releases flammable gas.
H332 Harmful if inhaled.
H351 Suspected of causing cancer.

16.6 WARNING

This sheet complements the technical information for use, but does not replace them.

The indications contained herein are based on what we know about the product currently and are provided in complete good faith.

The product must be used exclusively for the uses for which it was designed.

This document does not in any case dispense the user from being aware of and applying all the regulatory prescriptions concerning its activities. It will be the exclusive responsibility of the professional user to apply the precautions linked to the use of the product.

The professional user shall be fully responsible for:

- Preparing the safety measures concerning all the cases for the usage of the product, taking into account principally the data contained in this sheet.*
- Divulging to all those who handle the product the appropriate safety data and the warnings and advice concerning the risks mentioned throughout the documentation concerning the use of the product.*

All of the regulatory prescriptions mentioned are merely for the purpose of helping the recipient to respect the obligations that are imposed upon it when using the hazardous product. This listing is not to be considered as exhaustive and does not exonerate the recipient from respecting any other obligations incumbent upon them as a result of other regulatory sources other than those mentioned and also concerning the detention and handling of products for which it is solely responsible.

The technical assistance service of Cheddite Italy Srl-Bornaghi Division is available to users to provide assistance on specific matters, as far as possible and in the context of its own knowledge.