



BLADDER FUEL TANKS

*Since 1994*



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### M.E.RiN Safety fuel tanks Features:

- ❖ NON- EXPLODING
- ❖ In compliance with MIL-T-5578
- ❖ Self-Sealing / Flame Retardant
- ❖ Certified by **Beschussamt** Ulm in Germany and by **U.T.T.** in **Santa Severa**, Italy
- ❖ Self-sealing treatment keeping original applications and shape
- ❖ Less than 3% of fuel capacity reduction
- ❖ Various treatments available following customer needs

[M.E.RiN SELF-SEALING, NON-EXPLODING AND FLAME RETARDANT FUEL TANK EXAMPLE]



## STAY SAFE INSTALL M.E.RiN FUEL TANKS ON YOUR ARMOURED VEHICLE

### M.E.RiN SRL manufactures safety fuel tanks since 1994

For more than 20 years, Merin has been manufacturing explosion-suppressant, self-sealing and flame retardant fuel tanks using proprietary technologies developed for specific use in the Automotive, Marine and Aviation industries. Among the years, M.E.RiN proudly provided ballistic fuel tanks for Presidential Limousines, Head of State, Popes, Magistrates, and Security Force cars. Moreover, M.E.RiN fuel tanks have been used as safety equipment on bank's Armored cars, Military Off-Road Vehicles, boats and aircrafts too.

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# M.E.RiN srl

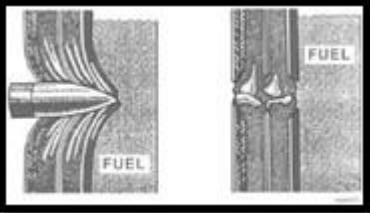



Since 1994

*Safety Without Compromise!*




# DISCOVER M.E.RIN BALLISTCOAT TREATMENTS SUITABLE FOR EVERY OEM FUEL TANKS

Working on OEM fuel tanks M.E.RIN is able to provide various level of protection.































Effectively, customers can choose even just one treatment, combine more, or ask for a complete protection. Available treatments are detailed here in below:

<p>Self- sealing coating</p> 	<p><i>Feature that, in case of gunshots, allows to avoid dangerous fuel leakages. M.E.RIN self-sealing knowledge has been developed to seal the bullet entry puncture and that of exit as well, but also bumps and fragments due to the impact. M.E.RIN developed 3 different self-sealing treatment.</i></p> <p><i>SFT/1064; SFT/1424; SFT/1425</i></p>
<p>Anti-explosion filling</p> 	<p><i>Feature obtained by the use of polyurethane foam (MIL -DTL-83054C) or by aluminum leaf spheres, named DETO-STOP, EXCO, etc.</i></p> <p><i>The anti-explosion filling does not alter or damage the original fuel tank equipment, neither the fuel pick-up.</i></p>
<p>Protection against Hand Grenade</p> 	<p><i>Application of different composite layers on the external fuel tank surface, based on aramid fabric.</i></p>
<p>Anti-flame protection</p> 	<p><i>Feature obtained by the application of specific resin on external fuel tank surface, charged by particular anti-flame materials. M.E.RIN is able to achieve and provide an important flame resistance that allows products to withstand the direct exposure to the fire for over 7 minutes.</i></p> <p><i>LAPI Fire test exposure over 7'</i></p> <p><a href="http://www.youtube.com/watch?v=7KTmmtceZAK">http://www.youtube.com/watch?v=7KTmmtceZAK</a></p>

## Seal sealing protection treatments:

STANDARD TREATMENT	SPECIFICATIONS	RESISTANCE	SHELF LIFE	PICTURE - EXAMPLE
SFT / 1425	Original position Wall thickness increase of 16/17 mm	Up to caliber <b>7.62</b> NATO AP	As the original one	<p>Metallic fuel tank for <i>Subaru Legacy</i> Treated according Stand. SFT/1425</p> 
SFT / 1424	Original position Wall thickness increase of 7/8 mm	Up to caliber <b>7.62</b> NATO AP	As the original one	<p>Plastic fuel tank for <i>BMW 530i -550i</i> treated according Stand. SFT/1424</p> 
SFT / 1094 According: MIL T 5578 - C	In the boot / Under chassis in the original position Wall thickness 5.98 mm	Up to caliber <b>12.7</b> NATO AP	Over 10 years	<p>Flexibel fuel tank for <i>Fiat Croma</i> Treated according Stand. SFT/1094</p> 

## Test level caliber chart

Test Levels	Weapon (examples)	Cartridge	Ammunition and bullet				Test conditions			M.E.RIN Ballistic Coat		
			Caliber	Type	Bullet Weight [gr.]	Producer / model	Test distance [m]	Required bullet velocity [m/s]	Bullet Energie [Joule]	Type SFT/1064	Type SFT/1424.S	Type SFT/1425.S
1			.22 lr	L/RN	2,6	Winchester	10 ±0,5	360 ±10	168	✓	✓	✓
2			9mm Luger	FMJ/RN/SC	8,0	DAG DM 41	5 ±0,5	360 ±10	518	✓	✓	✓
3			9mm Luger	FMJ/RN/SC	8,0	DAG DM 41	5 ±0,5	415 ±10	689	✓	✓	✓
4			.357 Mag.	FMJ/CB/SC	10,2	Geco	5 ±0,5	430 ±10	943	✓	✓	✓
			.44 Rem. Mag	FMJ*/FN/SC	15,6	Speer Nr. 4459	5 ±0,5	440 ±10	1510	✓	✓	✓
5			.357 Mag.	FMs/CB	7,1	DAG Spezial	5 ±0,5	580 ±10	1194	✓	✓	✓
6			7,62 x 39	FMJ/PB/FeC	8,0	PS	10 ±0,5	720 ±10	2074	✓	✓	✓
7			.223 Rem. (5,56 x 45)	FMJ/PB/SCP	4,0	MEN SS109	10 ±0,5	950 ±10	1805	✓	✓	✓
			.308 Win (7,62 x 51)	FMJ/PB/SC	9,55	MEN DM 111	10 ±0,5	830 ±10	3289	✓	✓	✓
8			7,62 x 39	FMJ/PB/HCI	7,7	BZ	10 ±0,5	740 ±10	2108	✓	✓	✓
9			.308 Win (7,62 x 51)	FMJ/PB/HC	9,6	FNB, P80	10 ±0,5	820 ±10	3261	✓	✓	✓
10			7,62 x 54 R	FMJ/PB/HCI	10,4	B 32	10 ±0,5	860 ±10	3846	✓	✓	✓
11			.308 Win (7,62 x 51)	FMJ/PB/WC	8,4	Nammo AP 8	10 ±0,5	930 ±10	3633	✓	✓	✓
12			.308 Win (7,62 x 51)	FMJ/PB/WC	12,7	SWISS P AP	-	810 ±10	4166	✓	Under development	Under development
13			.50 Browning	FMJ/PB/HC	43	SWISS P Penetrator	-	930 ±10	18595	Under development	Under development	Under development



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