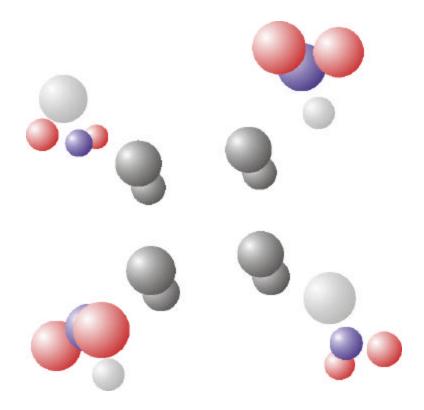
# Energetic Materials of Oklahoma, L.L.C



## 2001 Catalog and Price List

Welcome to the 2001 catalog and price list for Energetic Materials of Oklahoma, L.L.C.! Energetic Materials of Oklahoma, L.L.C. was started in the middle of the year 2000 with the sole intent to be a provider for restricted access rocket motors and rocket motor reloads for residents of the state of Oklahoma who either did not have nor wished to obtain a Low Explosive User's License (LEUP) or wanted to avoid the costly HAZMAT fees associated with shipping restricted access rocketry-related materials. As with all things, our product line has started to grow beyond AeroTech restricted access products to include ignition and staging materials as well as both raw materials and fabricated composite material parts. We also write software to assist in the design of experimental solid propellant rocket motors. Currently this software is free and can be downloaded from http://www.tamcon.com/emook/. If you don't find what you need in this catalog, please contact us and we will see if we can add it to our ever-growing product line. And if you need to borrow an RMS casing to burn a motor you buy from us, just let us know in advance.

Thank you for your business,

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Timothy A. Melton, Ph.D. Owner

#### What's that funky logo, anyway?

The logo of Energetic Materials of Oklahoma is a structural model of the molecule tetranitrocubane, a very energetic high explosive. Cubanes are compounds formed from a core of eight carbon atoms arranged in a cube, each one sharing a bond with three other carbon atoms. As the "preferred" bond angle between carbon atoms is 109.5°, forcing the atoms closer together to form 90° angles requires a great deal of energy. As a result, when these bonds are broken during combustion, a great deal of energy is released. Substitute nitro- groups for the hydrogen atoms that normally form the fourth bond to each carbon, and you make a very powerful, yet surprisingly stabile, high explosive. Tetranitrocubane has four such nitro- groups substituted, but the fully substituted nitrocubane, octanitrocubane, has also been produced in the laboratory. Cubanes have a wide range of potential uses from explosives to medicines. It forms the basis of quite a few energetic materials indeed.

## **AeroTech Products**



#### **Restricted Access RMS Hardware**

Prod. No.	Description	Retail Price	EMoOK Price
	54 mm Hardware		
5485S	54/852-1706 system	\$229.95	\$195.95
5485M	54/853 motor	\$119.95	\$101.95
5412M	54/1280 motor	\$134.95	\$113.95
5417M	54/1706 motor	\$139.95	\$118.95
5425M	54/2560 motor	\$169.95	\$144.95
54FCC	54 forward closure	\$35.95	\$30.95
54FCP	54 forward closure, plugged	\$35.95	\$30.95
54FCE	54 forward closure, extended	\$39.95	\$33.95
54FCEP	54 forward closure, ext.+plugged	\$39.95	\$33.95
54ACC	54 aft closure	\$35.95	\$30.95
5485C	54/852 casing	\$49.95	\$42.95
5412C	54/1280 casing	\$59.95	\$50.95
5417C	54/1706 casing	\$69.96	\$59.95
5425C	54/2560 casing	\$99.95	\$84.95
	75 mm Hardware		
7525S	75/2560-6400 system	\$899.95	\$764.95
7525M	75/2560 motor	\$279.95	\$237.95
7538M	75/3840 motor	\$299.95	\$254.95
7551M	75/5120 motor	\$319.95	\$271.95
7564M	75/6400 motor	\$369.95	\$314.95
75FCP	75 forward closure, plugged	\$69.95	\$59.95
75ACC	75 aft closure	\$59.95	\$50.95
7525C	75/2560 casing	\$159.95	\$135.95
7538C	75/3840 casing	\$179.95	\$152.95
7551C	75/5120 casing	\$199.95	\$169.95
7564C	75/6400 casing	\$259.95	\$220.95
	98 mm Hardware		
9825S	98/2560-10240 system	\$999.95	\$840.95
9525M	98/2560 motor	\$399.95	\$339.95
9851M	98/5120 motor	\$419.95	\$356.95
9876M	98/7680 motor	\$449.95	\$382.95
9810M	98/10240 motor	\$499.95	\$424.95
9815M	98/15360 motor	\$599.95	\$509.95
98FCP	98 forward closure, plugged	\$129.95	\$110.95

98ACC	98 aft closure	\$119.95	\$101.95
9825C	98/2560 casing	\$219.95	\$186.95
9851C	98/5120 casing	\$249.95	\$212.95
9876C	98/7680 casing	\$299.95	\$254.95
9810C	98/10240 casing	\$339.95	\$288.95
9815C	98/15360 casing	\$399.95	\$339.95

### **Restricted Access RMS Reloads**

Prod. No.	Description	Retail Price	EMoOK Price
	54/852 reloads		
10090S,M,L	J90W-S, M, L	\$66.95	\$59.95
10180S,M,L	J180T-S,M,L	\$66.95	\$59.95
10275S,M,L,X	J275W-S,M,L,X	\$66.95	\$59.95
10460S,M,L,X	J460T-S,M,L,X	\$66.95	\$59.95
	54/1280 reloads		
10135S,M,L	J135W-S,M,L	\$79.95	\$71.95
10415S,M,L,X	J415W-S,M,L,X	\$79.95	\$71.95
10800S,M,L,X	J800T-S,M,L,X	\$79.95	\$71.95
	54/1706 reloads		
11185S,M,L	K185W-S,M,L	\$93.95	\$83.95
11550S,M,L,X	K550W-S,M,L,X	\$93.95	\$83.95
11110S,M,L,X	K1100W-S,M,L,X	\$93.95	\$83.95
	54/2560 reloads		
11700P	K700W-P	\$113.95	\$102.95
	75/2560 reloads		
11560P	K560W-P	\$139.95	\$124.95
	75/3840 reloads		
12850P	L850W-P	\$199.95	\$179.95
	75/5120 reloads		
12112P	L1120W-P	\$259.95	\$232.95
	75/6400 reloads		
13131P	M1315W-P	\$319.95	\$287.95
	98/2560 reloads		
11458P	K458W-P	\$155.95	\$139.95
11650P	K650T-P	\$155.95	\$139.95
	98/5120 reloads		
12952P	L952W-P	\$299.95	\$269.95
12150P	L1500T-P	\$299.95	\$269.95
	98/7680 reloads		
13141P	M1419W-P	\$446.95	\$399.95
13240P	M2400T-P	\$446.95	\$399.95
	98/10240 reloads		
13193P	M1939W-P	\$599.95	\$539.95
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13250P	M2500T-P	\$599.95	\$539.95
	98/15360 reloads		
14200P	N2000W-P	\$839.95	\$754.95
	Miscellaneous		
89894	FirstFire Ignitors (3 pack)	\$5.95	\$5.49
89895	FirstFire Jr. Ignitors (3 pack)	\$5.95	\$5.49
RDK-[09-18]	Delay kits (3 pack)	\$4.95	\$4.49

### **Restricted Access Single Use Motors**

Prod. No.	Description	Retail Price	EMoOK Price
	29mm motors		
085506,10,14	H55W-6,10,14	\$20.95	\$18.95
087006,10,14	H70W-6,10,14	\$25.95	\$23.95
081246,1,4	H124W-6,10,14	\$21.50	\$19.95
081256,1,4	H125W-6,10,14	\$41.95	\$37.95
	38mm motors		
084510,15	H45W-10,15	\$41.95	\$37.95
091310,15	I132W-10,15	\$83.95	\$75.95
	54mm motors		
0965P	165W-P	\$83.95	\$75.95
10125P	J125W-P	\$146.95	\$132.95
11250P	K250W-P	\$214.95	\$193.95
11105P	K1050W-P	\$214.95	\$193.95

## **Ignition Supplies**

Prod. No.	Description	Retail Price	EMoOK Price
OXR2	Oxral Electric Match – 2m leads		\$1.25
89894	FirstFire Ignitors (3 pack)	\$5.95	\$5.49
89895	FirstFire Jr. Ignitors (3 pack)	\$5.95	\$5.49
THRS	Thermalite Red (slow)		\$1.00/ft.
THRM	Thermalite Green (medium)		\$1.00/ft.
THRF	Thermalite Black (fast)		\$1.00/ft.

Availability and pricing subject to change.

#### (NOTE: All prices are subject to change without notice.)

## **Composite Materials**

Energetic Materials of Oklahoma carries many materials needed for composite rocket construction. From dry cloth to core materials to preimpregnated cloth, if you need it we either have it on hand or can probably acquire it. We can also get resins, but most people would save more money and time by purchasing



epoxy systems that fit their needs from local retailers. The table below lists prices for materials that we almost always have on hand. We also often have carbon fiber cloth as well as unidirectional carbon tow available. If you're looking at pre-preg, be aware that this is 350° F cure material and that you will need a heated curing chamber and vacuum bagging apparatus and materials to properly use it. If you need parts or sheets made from pre-preg materials, get in touch with us and we will let you know what it would cost for us to make it for you. If you want pre-preg shipped, the cost of priority shippping, dry ice, and HAZMAT will be additional.

Prod. No.	Description	Retail Price	EMoOK Price
PEDG0350	3 oz. Dry fiberglass cloth, 50" width		\$6.50/yd.
PECPVC4	1/4" thick PVC core material		\$4.00/ft. <sup>2</sup>
PECNH8	1/8" thick Nomex honeycomb core material		\$5.00/ft. <sup>2</sup>
PECNH4	1/4" thick Nomex honeycomb core material		\$5.00/ft. <sup>2</sup>
PECNH2	1/2" thick Nomex honeycomb core material		\$6.00/ft. <sup>2</sup>
PECENH2	1/2" thick over-expanded Nomex honeycomb core		\$6.00/ft. <sup>2</sup>
PEGMB	Glass microballoon epoxy filler		\$7.50/liter
PEPC0042	350° F cure carbon fiber pre-preg cloth, 42" width		\$14.00/ft.
PEPCUT12	Unidirectional pre-preg carbon fiber tape, 12" width		\$7.00/ft.

(NOTE: All prices are subject to change without notice.)

#### Ordering

Orders may be sent via e-mail to <u>emook\_orders@tamcon.com</u>, via the EMoOK web page http://www.tamcon.com/emook/ (which will soon have a secure transaction form for added security), or by calling (405) 203-2859. Be sure to include your name, NAR or TRA number, and cert level. Orders for restricted access materials must be taken through the business office of Energetic Materials in Oklahoma City. I cannot take orders on site, but I can deliver orders to any launch that I will be attending. Anyone who will take delivery of their order as soon as it becomes available (that is, you either plan on using it or storing it according to BATF regulations within 24 hours) may take 5% off of their total. Don't forget that OKC sales tax is applicable.

#### Payment

Energetic Materials of Oklahoma, L.L.C accepts cash, personal or business checks, Visa, and Master Card. Payment is not due until the order is in hand on our premises. If you are taking advantage of the 5% discount, you must take delivery of your order within 24 hours of notification of its availability.



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Timothy A. Melton Owner TRA #7765 L2 NAR #75694 L2