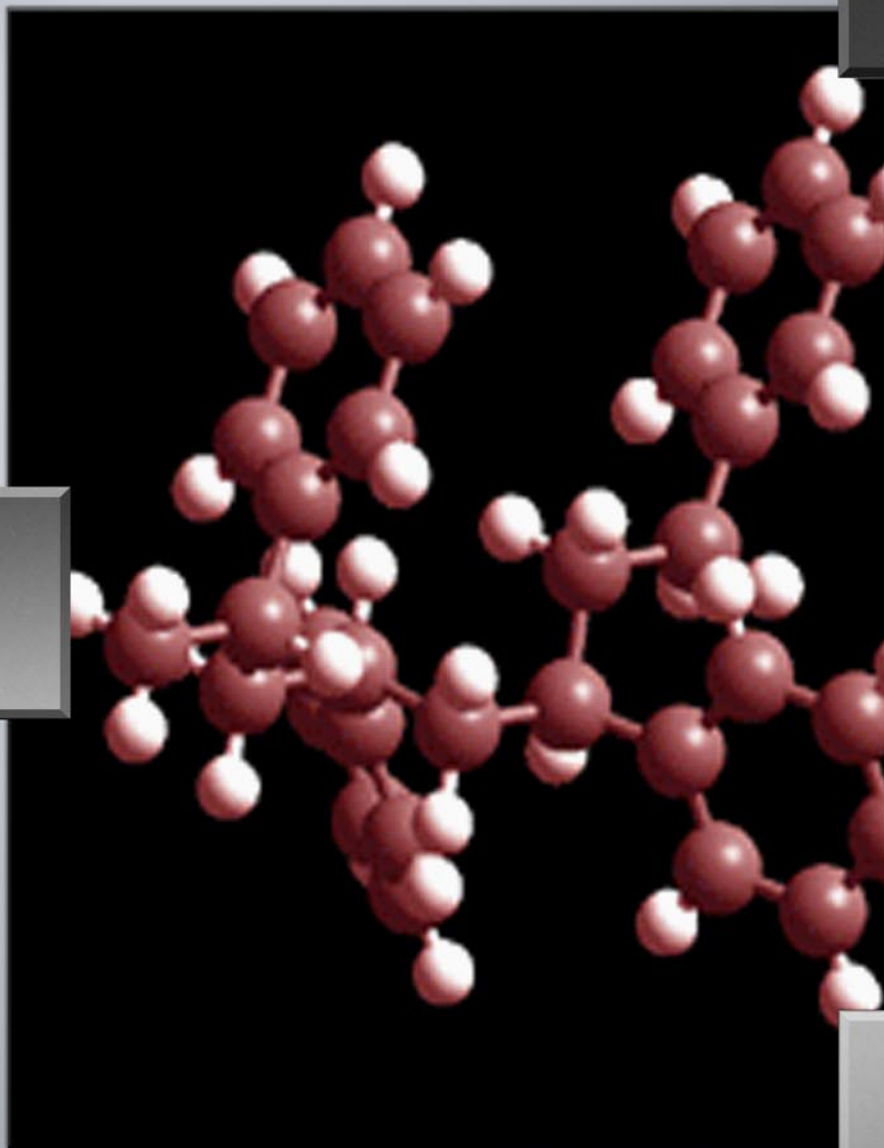


THE TRIBEES

The New State of the Art



Memory Plastic Toys
for the Dark Future

M Jason Parent



Requires the use of the d20 Modern™ Roleplaying Game, published by Wizards of the Coast, Inc.

SHARON-MEMORY POLYMERS

NEW TRIBES

LAYOUT, ART, CONCEPT AND DESIGN

M JASON PARENT

NEW TRIBES DEVELOPERS

DENISE ROBINSON

M JASON PARENT

"d20 System" and the "d20 System" logo are Trademarks owned by Wizards of the Coast, Inc. and are used according to the terms of the d20 System Trademark License version 6.0. A copy of this License can be found at www.wizards.com/d20.

Dungeons & Dragons® and Wizards of the Coast® are Registered Trademarks of Wizards of the Coast, Inc. in the United States and other countries and are used with Permission.

Some content included herein is derivative of existing Open Game Content as indicated in the Section 15 of the Open Game License. All contents, regardless of designation, are ©2005 M Jason Parent & E.N. Publishing. This edition of New Tribes: Shape Memory Polymers is produced under version 1.0a of the Open Game License, version 6.0 of the d20 System Trademark License and the current version of the System Reference Document and Modern System Reference Document by permission of Wizards of the Coast; subsequent editions of this product will incorporate the most current versions of the license, guide and document.

Declaration of Open Game Content: All text in this volume except for all E.N. Publishing logos, trademarks, product names and product lines is released as Open Game Content under the terms of the Open Game License version 1.0a.

© 2005 E.N. Publishing

OPEN GAME LICENSE Version 1.0a

The following text is the property of Wizards of the Coast, Inc. and is Copyright 2000 Wizards of the Coast, Inc ("Wizards"). All Rights Reserved.

1. Definitions: (a) "Contributors" means the copyright and/or trademark owners who have contributed Open Game Content; (b) "Derivative Material" means copyrighted material including derivative works and translations (including into other computer languages), potation, modification, correction, addition, extension, upgrade, improvement, compilation, abridgment or other form in which an existing work may be recast, transformed or adapted; (c) "Distribute" means to reproduce, license, rent, lease, sell, broadcast, publicly display, transmit or otherwise distribute; (d) "Open Game Content" means the game mechanic and includes the methods, procedures, processes and routines to the extent such content does not embody the Product Identity and is an enhancement over the prior art and any additional content clearly identified as Open Game Content by the Contributor, and means any work covered by this License, including translations and derivative works under copyright law, but specifically excludes Product Identity. (e) "Product Identity" means product and product line names, logos and identifying marks including trade dress; artifacts; creatures characters; stories, storylines, plots, thematic elements, dialogue, incidents, language, artwork, symbols, designs, depictions, likenesses, formats, poses, concepts, themes and graphic, photographic and other visual or audio representations; names and descriptions of characters, spells, enchantments, personalities, teams, personas, likenesses and special abilities; places, locations, environments, creatures, equipment, magical or supernatural abilities or effects, logos, symbols, or graphic designs; and any other trademark or registered trademark clearly identified as Product Identity by the owner of the Product Identity, and which specifically excludes the Open Game Content; (f) "Trademark" means the logos, names, mark, sign, motto, designs that are used by a Contributor to identify itself or its products or the associated products contributed to the Open Game License by the Contributor (g) "Use", "Used" or "Using" means to use, Distribute, copy, edit, format, modify, translate and otherwise create Derivative Material of Open Game Content. (h) "You" or "Your" means the licensee in terms of this agreement.

2. The License: This License applies to any Open Game Content that contains a notice indicating that the Open Game Content may only be Used under and in terms of this License. You must affix such a notice to any Open Game Content that you Use. No terms may be added to or subtracted from this License except as described by

the License itself. No other terms or conditions may be applied to any Open Game Content distributed using this License.

3. Offer and Acceptance: By Using the Open Game Content You indicate Your acceptance of the terms of this License.

4. Grant and Consideration: In consideration for agreeing to use this License, the Contributors grant You a perpetual, worldwide, royalty-free, non-exclusive license with the exact terms of this License to Use, the Open Game Content.

5. Representation of Authority to Contribute: If You are contributing original material as Open Game Content, You represent that Your Contributions are Your original creation and/or You have sufficient rights to grant the rights conveyed by this License.

6. Notice of License Copyright: You must update the COPYRIGHT NOTICE portion of this License to include the exact text of the COPYRIGHT NOTICE of any Open Game Content You are copying, modifying or distributing, and You must add the title, the copyright date, and the copyright holder's name to the COPYRIGHT NOTICE of any original Open Game Content you Distribute.

7. Use of Product Identity: You agree not to Use any Product Identity, including as an indication as to compatibility, except as expressly licensed in another, independent Agreement with the owner of each element of that Product Identity. You agree not to indicate compatibility or co-adaptability with any Trademark or Registered Trademark in conjunction with a work containing Open Game Content except as expressly licensed in another, independent Agreement with the owner of such Trademark or Registered Trademark. The use of any Product Identity in Open Game Content does not constitute a challenge to the ownership of that Product Identity. The owner of any Product Identity used in Open Game Content shall retain all rights, title and interest in and to that Product Identity.

8. Identification: If you distribute Open Game Content You must clearly indicate which portions of the work that you are distributing are Open Game Content.

9. Updating the License: Wizards or its designated Agents may publish updated versions of this License. You may use any authorized version of this License to copy, modify and distribute any Open Game Content originally distributed under any version of this License.

10. Copy of this License: You MUST include a copy of this License with every copy of the Open Game Content You Distribute.

11. Use of Contributor Credits: You may not market or advertise the Open Game Content using the name of any Contributor unless You have written permission from the Contributor to do so.

12. Inability to Comply: If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Open Game Content due to statute, judicial order, or governmental regulation then You may not Use any Open Game Material so affected.

13. Termination: This License will terminate automatically if You fail to comply with all terms herein and fail to cure such breach within 30 days of becoming aware of the breach. All sublicenses shall survive the termination of this License.

14. Reformation: If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable.

15. COPYRIGHT NOTICE

Open Game License v 1.0a Copyright 2000, Wizards of the Coast, Inc.

System Reference Document Copyright 2000-2003, Wizards of the Coast, Inc.; Authors Jonathan Tweet, Monte Cook, Skip Williams, Rich Baker, Andy Collins, David Noonan, Rich Redman, Bruce R. Cordell, based on original material by E. Gary Gygax and Dave Arneson.

Modern System Reference Document Copyright 2002, Wizards of the Coast, Inc.; Authors Bill Slavicsek, Jeff Grubb, Rich Redman, Charles Ryan, based on material by Jonathan Tweet, Monte Cook, Skip Williams, Richard Baker, Peter Adkison, Bruce R. Cordell, John Tynes, Andy Collins, and JD Wiker.

New Tribes Copyright 2004, E.N.Publishing; M Jason Parent & Denise Robinson

New Tribes: Shape Memory Polymers Copyright 2005, E.N.Publishing; M Jason Parent & Denise Robinson

END OF LICENSE

SHAPE MEMORY POLYMERS A BRIEF INTRODUCTION

By the turn of the millennium, engineers at Brunel University had finalized the design and implementation of a family of 'shape memory polymers'. These polymers retain a given shape after heating and remoulding. This means that they could be moulded into one shape, and then would change to the 'memory' shape when heated to a certain temperature. Advanced polymers could have two or more different shapes that would be reached at different target temperatures.

First introduced in Japan and then the United States 1984, shape memory polymers are polymers whose qualities have been altered to give them dynamic shape "memory" properties. Using thermal stimuli, shape memory polymers can exhibit a radical change from a rigid polymer to a very elastic state, then return back to a rigid state again. In the elastic state, a shape memory polymer will recover its "memory" shape if left unrestrained. However, while in this pliable state it can be stretched, folded or otherwise conformed to other shapes, tolerating up to 500% elongation. While manipulated, the shape memory polymer can be cooled and therefore returned to a rigid state, maintaining its manipulated shape indefinitely. This manipulation process can be repeated many times without degradation. Unlike shape memory alloys, SMP exhibits a radical change from a normal rigid polymer to a very stretchy elastic and back on command, a change which can be repeated without degradation of the material. The "memory," or recovery, quality comes from the stored mechanical energy attained during the reconfiguration and cooling of the material. The secret behind these clever materials lies in their molecular network structure, which contains meltable "switching segments".

Modern variations on the classic turn-of-the millennium shape memory polymers react to other stimuli than heat – one of the most important is a photonic reaction which allowed for the creation of quick and affordable fibre-optic switching units. Other developments include exposure (or lack of exposure) to oxygen – these polymers are now in use in many orbital applications where they can instantly seal small breaches in vehicle and station hulls as well as personal protective equipment. Finally, piezo-stimulus shape memory polymers react to different electrical currents by taking on different shapes. Some become

pliable under a specific current, others remain pliable until a current is established, and the more elaborate designs have multiple states, and can switch from one hardened state to another through the intermediary pliable state simply by changing the current applied to the plastic. Some other varieties include magnetic field-triggered polymers and acid-base reaction polymers used in some scientific applications.

To date, the most common usage for shape memory polymers is in the production of other plastics. SMP (Shape Memory Polymer) moulds can be made of a hard and high-temperature material for high precision injection moulding, and then with the application of electrical current, the moulds seem to melt away from the final product, then reform into the mould format again when the current is turned off. In addition, modern SMP foamed polystyrene allows for convenient shipping of products in large polystyrene shipping units to protect against jostling and abuse, then the polystyrene packing containers can be compressed, releasing the air within the structure and reducing the container down to a plastic block less than 3% of the normal volume of the polystyrene. These are shipped back to the original sender where they are heated and 'fluffed' to be returned to their normal size and shape.

By the late 2020's, SMP characteristics can be engineered into almost all polymers, allowing for automobile fenders to be bent back into shape with the application of the right amount of heat; the creation of multiform solid-state furniture that shifts to accommodate different users with the press of a button; and a million other household uses. Some low-rent apartment buildings even use piezo-activated SMPs for the doors on their units so the door can be quickly 'melted' with the application of a simple stun-gun-like device.

The tools, weapons and equipment in this product assume that SMP technologies achieve this level of sophistication, but do not exceed it by much over coming years. This works well for a campaign set with technology in Progress Level 6. The technology remains somewhat stagnant during Progress Level 7 (so the tools and weapons are still available) and evolves into Shape Memory Metallic Alloys and Ceramics at Progress Levels 8 and 9.

DAY-TO-DAY SMPs USES IN YOUR EVERYDAY EXISTANCE

CONSUMER ELECTRONICS

A majority of personal consumer electronics such as cellular phones, music players, PDAs and other products are now manufactured using simple shape memory polymers. This allows them to be easily broken down into component parts when they cease to function. When heated, these devices effectively flip themselves inside out, simplifying the removal of environmentally-sensitive parts such as batteries. In many countries, manufacture of such devices without using specific types of shape-memory polymer casings is illegal, and severe import restrictions are also in place. This is particularly true in Europe and Asia.

FEDEX ENVELOPES

Although it is not well-known, in 2030, FedEx started using memory polymers for their packing envelopes. Once the top has been sealed, the envelope or other FedEx branded packing material can only be opened by ripping, or by using a low-powered microwave emitter which opens the bottom of the package for easy inspection of the contents. Only a small amount of shape memory polymer is used in this design, keeping the envelopes comparable in price to standard packaging materials.

INSTANT RIGID TIRES

These automotive tires change form once a sensor on the wheel in the tire indicates a loss of pressure. In effect, the tires become hard and rigid when punctured instead of becoming flat. These tires are dangerous to drive on in this state, but significantly less so than driving without a tire. This eliminates any rolls to maintain control of a vehicle when a tire is blown out, but increases the DC of any Drive checks thereafter by +2 per punctured tire, with an additional +2 DC if all tires on a vehicle are punctured. Most vehicles equipped with instant rigid tires also have the wheel sensors linked to displays in the vehicle to indicate when a puncture has been detected. A set of four instant rigid tires has a purchase DC of 15.

PLASTI-TIGHT JEANS

In marketing, fashion is defined as a product that is currently popular, but that follows a recurring life-cycle. The fashion of tight clothing rarely lasts for long, but the latest styles in such clothes rely on shape memory polymers. Plasti-Tight jeans are made of a very thin and loose, although not particularly strong plastic material. Once they have been put on, they are activated (by pressing a button on the belt) and react by becoming a much smaller elastomer. In this way, they shrink to an exact skin-tight fit. The ultimate tragedy for the hip young kid in his plasti-tight jeans is when the battery runs out while at the 'in' night club.

VARIABLE SHOES

While tight-fitting clothing suffers the vagaries of fashion, high heels seem to stick around forever. Several major shoe manufacturers now produce variable-mode shoes – shoes where the sole and heel are made of a shape-memory polymer so they can be switched from high heels to flats and then back again simply by lifting your foot, pressing a button, and waiting a few seconds. Originally available exclusively in designer brands of high heels, variable heel boots are also now on the market as well as shoes at every point on the price-line. Variable shoes generally have a purchase DC 1 point higher than similar, non-variable, shoes.

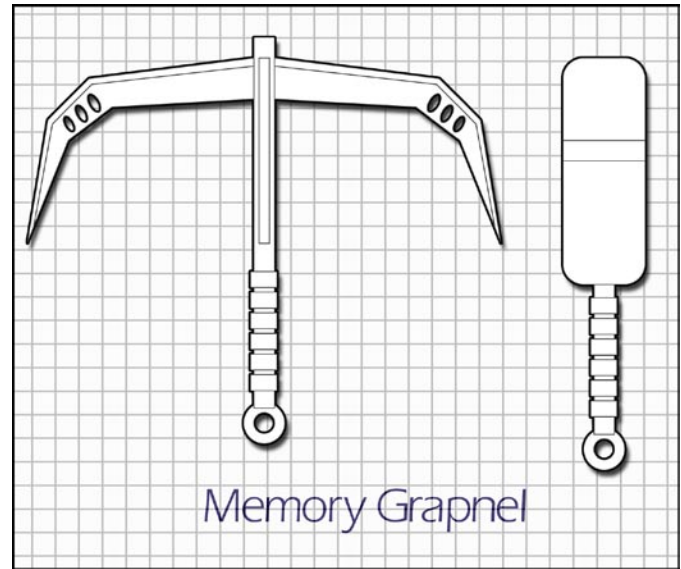
VEHICULAR PLASTICS

Automotive and other vehicle body parts that are not subjected to extreme environments are typically made of SMPs by the mid-point of Progress Level 6. This does not increase the costs of conventional vehicles (especially since civilian ground vehicles in this Progress Level are typically merely higher efficiency PL 5 vehicles). It does, however, decrease the difficulty of repairing minor body damage by -5 DC, and the cost of such repairs by -1 DC.

SHAPE MEMORY EQUIPMENT TOOLS, TOYS & USEFUL GADGETRY

MEMORYFIBRE ROPE

Memory Fibre rope is a heavy plastic-based rope with a high-friction outer layer to aid in climbing. The shape memory of the rope has two stages, a short and heavy stage where the rope is only 25 feet long and 7/8 of an inch thick, and a long stage where the rope is 100 feet long and 7/16 of an inch thick. MemoryFibre rope is available in other lengths, as indicated below, with the elongated length always being four times longer than the short length. The long stage is the standard thickness of most climbing ropes, and has a breaking strength of nearly 7,000 pounds (standard for most climbing ropes, able to handle a stress of 30 KiloNewtons). In its thick stage, it has a strength nearly triple that of the long stage. Switching stages requires that a current be passed through the rope, and is done by depressing a button at one end of the rope. The process of changing modes will untie loose knots in the rope, but will make the rope snap if there are any tight knots along the length as the rope is shifting from long phase to short phase. Originally, the activation button was meant placed at the top end, so the rope can be easily retracted after climbing, but now the MemoryFibre rope is available with a grapple built into one end, so the user can throw and hook the grapple, then make the rope contract, providing for a much faster and easier ascent. It takes 10 seconds for MemoryFibre rope to contract or expand 75 feet – so a character hanging on to such a rope as it contracts will climb or be pulled 40 feet per round.



Memory Grapnel

line to deliver an electrical impulse to the grapnel. When the impulse is received, the grapnel switches to the ovoid state for easy removal. The problem with this design is that the conductor line can break during the normal use of the climbing rope, especially if it subjected to any sharp stresses or knotting. The second model contains a battery and is remote-operated. The disadvantage of this model is that it is vulnerable to electronic jamming methods, or to being activated by a matched remote device, potentially in the middle of a climb.

QUICK RELEASE MEMORY GRAPNEL

The quick release grapnel is available in two models. Both have two modes, one being a classic hard polymer grappling hook, while the second is that of an ovoid of hard polymer. The two models differ in how they are triggered to switch states. The original model is attached to a specialized climbing rope that contains a conductor

DOOR JAM

5-inch wide pucks of shape-memory plastic, door jam (sold in a tube of six pucks, usually with a label akin to that on a jar of preserves) is a hard plastic with a paper backing protecting an adhesive face. Electrically-

Gear	Size	Weight	Buy DC	Res
Rope, MemoryFibre, 100 ft. - contracted	Large Medium	9 lb. 9 lb.	7	-
Rope, MemoryFibre, 200 ft. - contracted	Large Medium	18 lb. 18 lb.	10	-
Rope, MemoryFibre, 300 ft. - contracted	Huge Large	27 lb. 27 lb.	12	-
- Attached Grapnel		+3 lb.	+2	-
Quick Release Memory Grapnel	Small	3 lb.	7	-
Door Jam	Tiny	2 lb.	8	-

NEW TRIBES

activated, door jam rapidly turns into a runny elastomer, nearly liquid in form. Within seconds, door jam returns to its normal rock-hard consistency, but now in the new configuration. The triggering electrical impulse is generally the same from brand to brand, and is triggered by a small hand-held contact device included in the lid of the can. Typically, door jam is placed on a door frame, half on the frame and half on the door, and then activated. It leaks into the gap between the door and frame and solidifies there,

effectively jamming the door shut. A door or other device that has been sealed with door jam must be broken open, and the break DC is increased by 5, unless you can apply the same current to the door jam to trigger it back into its semi-liquid form. While easy to do from the same side as the jam was applied from, this is typically impossible from the other side.

A pack of six door jams is a tiny object with a purchase DC of 8 that weighs 2 lbs.

SHAPE MEMORY WEAPONRY NEW TOOLS TO DO OLD JOBS

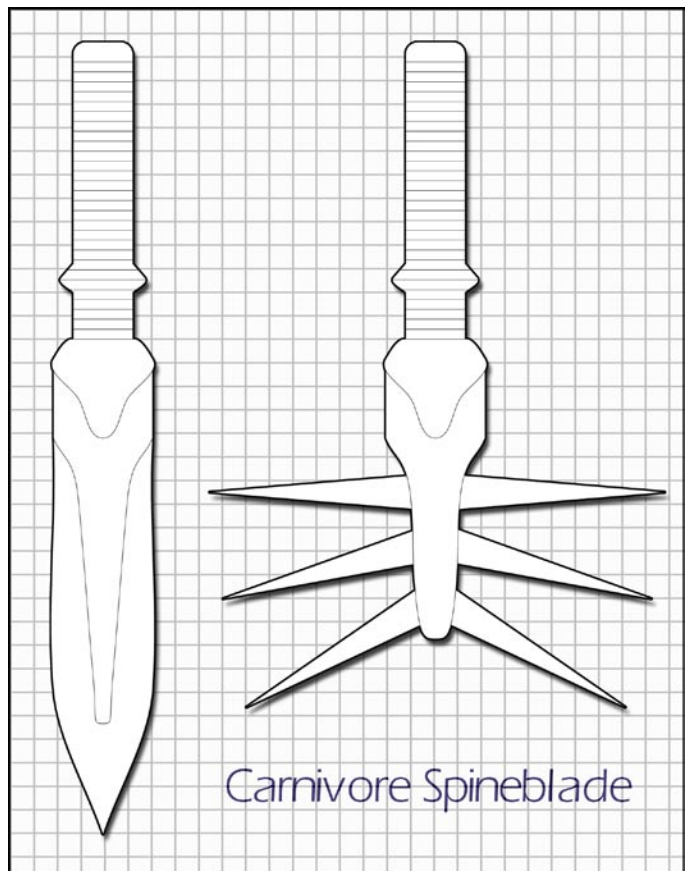
Weapon	Dmg	Crit	Dmg Type	Range	Size	Weight	Purchase DC	Restriction
Instant Shiv	1d4	19-20	Piercing	10 ft.	Tiny	1 lb	6	Mil (+3)
Carnivore Spineblade	1d4	19-20/x3*	Piercing	10 ft.	Tiny	1 lb	12	-
Spineblade (with spines)	1d3	20	Piercing	5 ft.	Tiny	1 lb.		
Spineblade longbow arrow	1d8	20 / x4*	Piercing	-	-	1/2 lb.	12	-
Spineblade crossbow bolt	1d10	19-20/x3*	Piercing	-	-	1/2 lb.	12	-
FlexChux (Rod)	1d6	20	Bludgeoning	-	Med	4 lb.	12	-
FlexChux (Nunchaku)	1d6	20	Bludgeoning	-	Small	4 lb.		

INSTANT SHIV

At its simplest, SMP weaponry is a new tool for violence that is incredibly difficult to spot for security forces of all types. The Instant Shiv is a perfect example of how dangerous SMP weapons can be. In its standard form, an instant shiv is a block of plastic about the size of a wallet or a deck of cards. When triggered, the plastic softens to the elastomer stage and reforms into a sharp-edged blade. Most instant shivs are triggered by the application of electricity in an easily-purchased format, such as the battery from a personal entertainment device. Some are triggered by heat or microwaves, depending on the environment they are meant to be used in. All are banned as assassination weapons.

CARNIVORE INC. SPINEBLADE

To the naked eye this weapon appears as any other high-impact plastic combat knife balanced for throwing - matte black in colour and somewhat lighter and shorter than a full-sized combat knife. The difference manifests in combat: whenever the weapon is driven deep into a surface, it immediately changes form from that of a smooth knife blade to a brutal set of spines - inside the victim! This increases the critical multiplier of the weapon from the typical x2 of a knife to the x3 of the spineblade. If the wielder succeeds at a DC 18 Strength check, then



NEW TRIBES

IMPLAST COMBAT GLOVES

One of the first implementations of shape memory plastics into the combat arena are these heavy gloves. Implast combat gloves feel like traditional neo-leather gloves (available with full fingers or partial fingers, with or without thumbs), but have a small battery built into the wrists. When activated (a move action that does not provoke an attack of opportunity), the interior of these gloves changes phase from a flexible elastomer into a non-flexible and very hard solid polymer. While the gloves are in this mode, it is nearly impossible to pick up or use anything requiring digital dexterity (-6 on all Dex-based skill checks or ability checks that require the use or flexibility of one's hands), but the wielder now deals lethal damage with every bare-handed attack made while wearing the gloves. In this form, the gloves have a hardness of 6 and 4 hit points.

A pair of Implast Combat Gloves weighs 1 pound, has a purchase DC of 13, and is unrestricted.

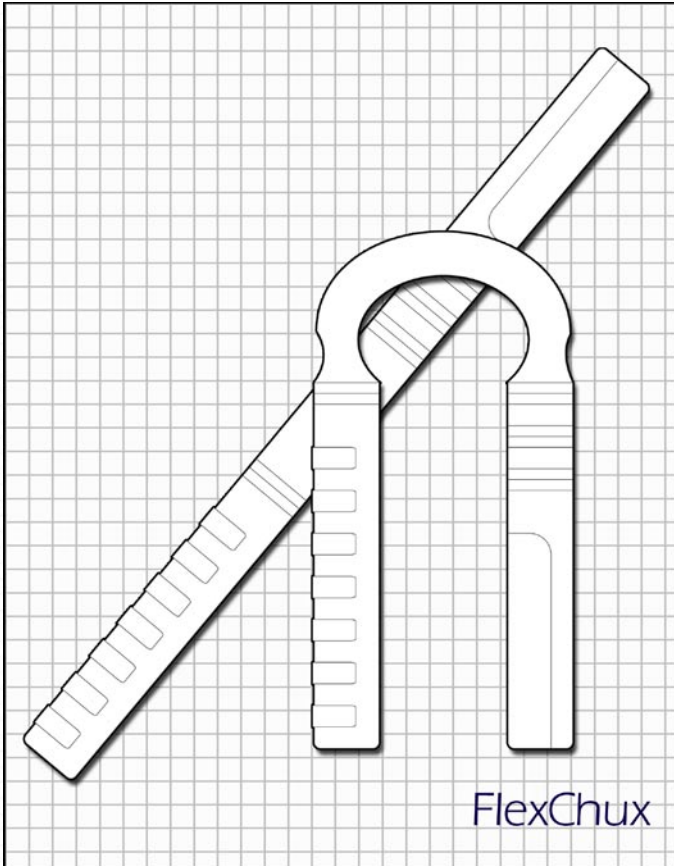
IMPLAST MK II COMBAT GLOVES

The second series of Implast Combat Gloves changes state in reaction to kinetic impact instead of being piezo-stimulated. When used in hand to hand combat, the gloves immediately harden on impact, and are treated identically to the standard Implast Combat Gloves above. However, the gloves slowly return to their normal elastomer state afterwards. While the gloves are in the hardened state, it is nearly impossible to pick up or use anything requiring digital dexterity (-6 on all Dex-based skill checks or ability checks that require the use or flexibility of one's hands), but this penalty is reduced by 2 every round until the gloves are soft and pliable again.

A pair of Implast Mk II Combat Gloves weighs 1 pound, has a purchase DC of 14, and is unrestricted.

FLEXCHUX!

More of a gimmick than anything else, this demonstrates that people will buy anything taking advantage of modern shape memory polymers. FlexChux appear normally to be a hard plastic, weighted rod. One end is weighted with 2 pounds of steel rod, while the other contains a solid-state battery, conductors and triggering mechanism. When the button is depressed, the middle of the FlexChux suddenly becomes flexible, turning the rod into a set of nunchaku. The main advantage of this is that in its inert mode, FlexChux look more like a maglight than a martial arts weapon, and that it can be used as a hambo one round, as nunchaku the next.



he is able to maintain a grip on the weapon and pull it back out of the target, increasing the critical multiplier to x4 for that attack. If the Strength check is failed, not only is the critical multiplier left at x3, but the weapon remains lodged in the wound, effectively disarming the wielder. To reset the spineblade to its normal shape requires heating the weapon to 150 degrees Celsius, difficult to do while the blade is lodged in a victim. Safely removing the blade in this format requires a DC 25 Treat Injury check. If the check fails but the result is over 20, then removal deals 1d4 damage. If the check result is under 20, then removal deals 2d4 damage. Once the spineblade has switched to its secondary form, it is generally useless as a weapon until it is reset to its normal shape.

SPINEBLADE ARROWS & BOLTS

Carnivore Inc. recently began manufacturing SpineBlade arrows and bolts for bows and crossbows. Because the head is both lighter than a standard arrow head and larger, attacks with these weapons are at a -1 penalty on the attack roll. However, the critical multiplier is increased by 1, and the arrows are incredibly difficult to remove, as per the rules above for removing SpineBlades from a victim.

SHAPE MEMORY ARMOUR

NEW THREATS = NEW DEFENSES

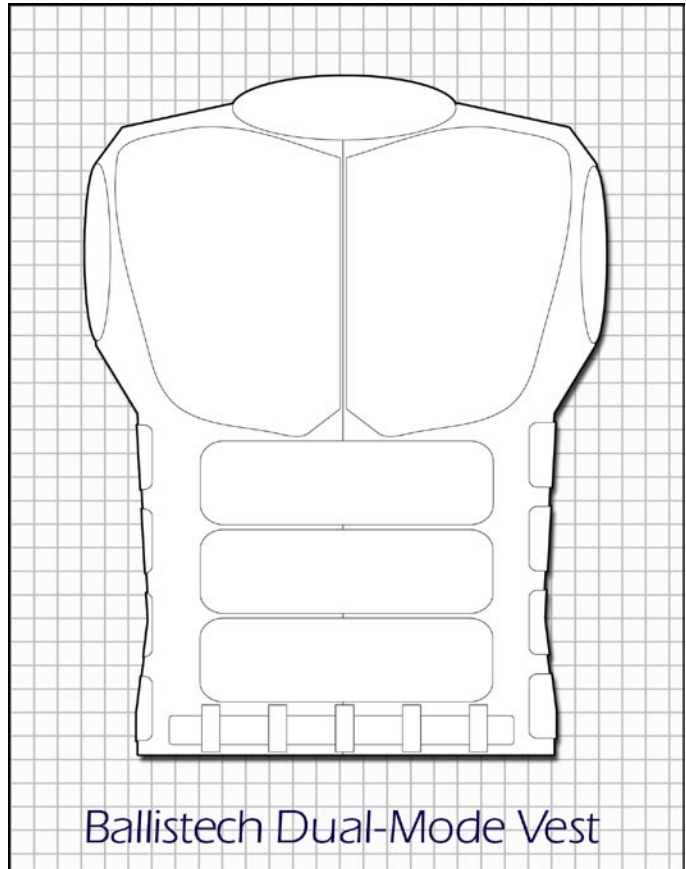
BALLISTECH DUAL-MODE COMBAT ARMOUR

Ballistech developed a full series of SMP-lined clothing that hardens on command in key locations to provide optimal combat protection. These clothes switch from their non-armoured state to their armoured state with activation of a switch, typically hidden in the collar of most pieces. A variety of suits are available, but a majority are restricted by local ordinances against the wearing of body armour, specifically of concealed varieties.

All dual-mode armours appear to be plastic or PVC body-suits or portions thereof until activated, when they harden and take on the form of light tactical armour. The exception is the Society Suit, which is sewn into the interior of a suit jacket and pants, and is not only easily concealed, but remains lightly concealed even when activated.

BALLISTECH ΣΧΟΠΙΑΣΤ ARMOUR INSERTS

These SMP 'plates' are designed to be inserted into the slip pockets included in most police and military body armours. Inserts are designed to protect key body parts from attack, but also make most vests significantly heavier and more cumbersome than wearing a vest without inserts. Jackets and other body armour not normally used by military or police forces can be purchased with the same slip pockets at an increase of purchase DC by 1. ExoPlasts are rapid-changing SMPs that harden nearly instantly when struck (similar to Implast Mk II Combat Gloves). High-velocity impacts make it harden into a honeycomb matrix that is very bullet resistant, while lower-velocity impacts set the inserts into a hard but more malleable format better suited against blunt impacts. These inserts increase the Equipment Bonus of the armour they are inserted into by



+2 against blunt and ballistic attacks, and by +1 against slashing and piercing attacks. They do not affect the Max Dex Bonus of the armour, but do worsen the Armor Check Penalty by 1 point.

A set of ExoPlast inserts weighs 2 pounds, has a purchase DC of 16, and is a licensed item (Lic +1).

Armour	Type	Equip. Bonus	Nonprof. Bonus	Max Dex	Armour Penalty	Speed (30 ft)	Weight	Purchase DC	Restriction
Ballistech Vest	Concealable	+0	+0	+8	-0	30	6 lb	19	Lic (+1)
- Active	Tactical	+5	+3	+3	-4	25	6 lb		
Ballistech Jacket	Impromptu	+1	+1	+6	-0	30	9 lb	20	Lic (+1)
- Active	Tactical	+6	+3	+2	-5	25	9 lb		
Ballistech Light Vest	Concealable	+0	+0	+10	-0	30	3 lb	17	Lic (+1)
- Active	Concealable	+3	+2	+5	-2	30	3 lb		
Ballistech Society Suit	Concealable	+0	+0	+6	-0	30	8 lb	21	Lic (+1)
- Active	Tactical	+6	+4	+2	-5	25	8 lb		
Ballistech Combat Suit	Tactical	+3	+1	+5	-2	30	18 lb	21	Lic (+1)
- Active	Tactical	+8	+4	+0	-7	20	18 lb		

NEW TRIBES

IMPLAST BODYSUIT

Implast BodySuits were first introduced for police use in the late 2010's. At the time it was a remarkable piece of Memory Plastic technology that made claims it couldn't hold up to. The 2030 edition (mark III) is finally a body armour people are looking at again. Not incredibly useful on its own, it is at its best under another layer of armour. An Implast BodySuit becomes rigid in reaction to an impact, attempting to redistribute the impact across a greater area. This works exceptionally well against piercing and slashing weapons, generally preventing the weapon from reaching any vital internal organs, and even helps prevent damage from bludgeoning weapons. The critical multiplier of any piercing or slashing weapon is reduced by 1 against a target wearing an Implast BodySuit. In addition, there is a 50% chance of any critical hit being completely negated by the BodySuit, as well as any additional damage dealt by precision-based attacks (such as sneak attack damage). The success rate of the BodySuit against such attacks is actually much higher, but the 50% chance assumes that a large number of the attacks that the suit fails to protect against struck unarmoured areas. Directly after the impact of an attack, the suit becomes stiff and hard, giving the suit an Armour Check Penalty of -1 each time it is struck (cumulative) to a maximum of a -6 Armour Check Penalty. The Armour Check Penalty is reduced by 1 point each round until it returns to zero.

An Implast BodySuit weighs 5 pounds, has a purchase DC of 20, and is a licensed item in most jurisdictions (Lic +1).

SKATETEK M A X

SkateTek licensed the use of one of the Implast BodySuit precursors to develop the MAX line of skate gear. SkateTek M A X gear incorporates a slow-response memory plastic design to help anyone who moves at high speeds to survive sudden meetings with the local road surface. This is then sewn into funky-looking skate gear with minimal protective benefits of its own. Initially it was picked up by their target group (couriers and skaters) but as the design got better and better reviews it has seen wear by many motorcyclists and even combat-bike teams. When M A X gear is involved in a heavy impact (bludgeoning damage exceeding 6 damage), it solidifies into a full-body shield of very hard and tough plastic, gradually softening thereafter. Once triggered, it provides DR 10/- the next round, and provides an immediate Armor Check Penalty of -10, and a Max Dex Bonus of -4. It softens at a rate of 2 DR each round, also reducing the Armor Check Penalty by 2 and increasing the Max Dex Bonus by 2. After 5 rounds, the M A X gear returns to 0 DR, 0 Armor Check Penalty and a Max Dex Bonus of 6. While SkateTek M A X provides no protection from a preliminary impact with the road surface, it does provide excellent protection against the ensuing road-rash. When falling from a moving vehicle, or in similar circumstances where most of the damage of the impact is caused by lateral momentum, SkateTek M A X reduces the damage by $\frac{1}{2}$, and by $\frac{3}{4}$ if the wearer makes a successful DC 20 Reflex save against the damage. It is generally recommended that anyone wearing M A X gear should avoid melee combat involving blunt weapons. SkateTek also makes the S K 8 M A X line which also incorporates specific elbow, wrist and knee/shin guards with E-Z-Glide plastics. E-Z-Glide Plastics shear in very fine sheets (much like graphite) when rubbed hard at an oblique angle, this enables people to slide on the pads "like an eel in jello". Any acrobat manoeuvres involving sliding on knees or elbows (including tumble checks) are done with a +2 equipment bonus in S K 8 M A X gear, and a character can tumble up to $\frac{3}{4}$ of his normal movement with a Tumble check instead of the normal $\frac{1}{2}$ of movement. S K 8 M A X gear has an Armour Check Penalty and Max Dex Bonus one worse than standard M A X gear, including when activated.

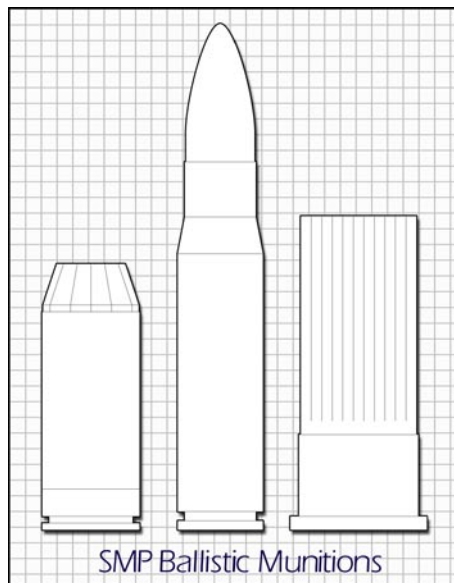
Armour	Type	Equip. Bonus	Nonprof. Bonus	Max Dex	Armour Penalty	Speed (30 ft)	Weight	Purchase DC	Restriction
SkateTek M A X	Impromptu	+1	+1	+6	-0	30	5 lb	15	-
SkateTek S K 8 M A X	Impromptu	+2	+2	+5	-1	30	8 lb	17	-

SMP MUNITIONS

OLD-SCHOOL BALLISTICS

Polymers were initially ignored for firearms munitions because of both their relatively low density when compared to lead and other metals normally used in the manufacture of convention bullets, and because of their lack of expansion, thus producing small wound tracks and therefore less damage.

With pre-stressed frangible munitions, polymers began to pay off, as they would break up on impact, producing multiple wound channels. The development and use of high-density polymers also began to offset the problem of firing such light munitions.



the size of a quarter (for a .45 slug, larger for bigger rounds), which decelerates rapidly inside the target, while travelling along unusual courses. While of generally short range due to their light weight, the long, thin triangular cross-section of the round allows it to penetrate body armor with startling efficacy, dealing terrifying amounts of damage thereafter.

Rules: Although expanders reduce the firearm's range increment by 10 feet (to a minimum of 10 feet), they provide a +2 circumstance bonus on attack rolls against armoured targets,

FRANGIBLE PLASTIC MUNITIONS

These light bullets fire faster and decelerate more rapidly than a standard lead or high-density metal slug. On impact, they break up into three to twelve deadly sub-munitions which decelerate rapidly within the target, creating multiple wound channels. However, the round is prone to shearing and fragmenting on impact, before penetrating body armour. This also makes the round safer for use in environments where over penetration is an issue (such as inside aircraft).

Rules: Against a target wearing armour or natural armour, these rounds suffer a -3 penalty on attack rolls. However, they gain a +2 circumstance bonus on damage rolls (whether the target is armoured or not). The weapon's range increment is also reduced by half. Frangible plastic munitions have a purchase DC of 2 + the purchase DC of standard ammunition of similar calibre.

MEMORY EXPANDING FLECHETTES

Memory Expanding Flechettes (more commonly known as Expanders) borrow bleeding-edge technology from the spineblades and adapts it to firearms use. The standard lead or metallic slug is replaced with a high-density polymer flechette that expands once it strikes into a soft body, such as ballistic gelatine or a human body. The round quickly changes shape to something approximating

and a +2 circumstance bonus on damage rolls against all soft (fleshy) targets. Memory expanding flechette munitions have a purchase DC of 11 plus the purchase DC of standard ammunition for the intended firearm.

MacroPlastic Magazines

While there is typically little to be gained from using plastic magazines except a slight reduction in weight, SMP magazines paired with frangible plastic munitions offer a non-metallic solution to getting ammunition into restricted environments. Using high-density plastic casings instead of standard brass casings (to prevent discovery by metal detectors), the bullets are then sealed into a hardened high-density SMP case that is then hermetically sealed. The entire magazine is then placed into a mild chemical bath to destroy any chemical trace of the propellant used in the slugs to prevent 'sniffing' technologies from detecting the bullets by their chemical signature. When placed into a firearm and the bottom of the magazine is connected to a small power source (typically worn as a ring by the wielder), the magazine opens up and functions as a standard magazine of its type. This method of smuggling ammunition works best for small arms ammunition in pistol-sized magazines.

Weight: 1 lb; Purchase DC 10; Restriction: Mil (+3).