

APPLICATION BROCHURE
REGUPOL SONUSFIT





THE NEED FOR **ACOUSTICS IN GYMS**

In mixed-use buildings, different utilization concepts are combined. Gyms provide a safe, functional, and comfortable workout environment. The more amenities and equipment, the more attractive the gym. To ensure the peaceful coexistence of the gym with other areas, an efficient soundproofing solution which reduces low-frequency noise is required.

Requirements for noise reduction are particularly complex due to different training methods and noise sources. Also, there is not a standard test method for acoustical measurements under conditions similar to those in gyms. So how do you evaluate acoustics for gyms?



SPECIAL CHALLENGES

The main problem is the lack of applicable test standards. The tapping machine offers a standardized measurement procedure, but it doesn't accurately represent gym noise. The Japanese rubber ball test is also standardized and provides low-frequency excitation, but doesn't use enough mass to simulate the energy input from weights.

Initial measurements with noise sources commonly found in gyms, such as dumbbells, barbells, and kettlebells, showed clear limitations in the reproducibility of the measurements. This can be attributed to the geometry of the test specimens. When dumbbells or barbells are dropped, they rarely hit the ground with both sides simultaneously. This doesn't occur with kettlebells. However, the base of most kettlebells is flat, which causes the edge to hit the ground at different angles. This generates different signals, which decreases accuracy and reproducibility.

OUR APPROACH

In order to ensure the reproducibility of measurements and comprehensively represent the most diverse noise sources, we first constructed a dropping machine that can lift various weights up to 200 kg at a height of two meters. The drop height is measured from the top of the floor to the bottom of the weight. By using steel balls with masses of 30 kg and 75 kg, it was possible to optimize the reproducibility to a sufficiently accurate level. Small deviations of about 1 dB occur in both the laboratory and the gym.

With this application-oriented and reproducible measurement process, **REGUPOL** is able to carry out numerous in-house tests. A wide variety of systems for fitness applications can be compared accurately. Elastic damping layers were combined in such a way that noise and risk of injury remained low. These are the results of the symbiosis of different expertises of **REGUPOL**: The **sonusfit** range combines decades of experience in the field of acoustics with equal experience in the field of fitness flooring. Thus, in addition to the clear goal of developing acoustically effective flooring systems, the focus has always been functionality.



OUR SOLUTIONS:

SPORTS FUNCTIONALITY AND QUIETNESS

WITHOUT COMPROMISE

The portfolio of the **REGUPOL sonusfit** range combines functionality with highly efficient sound insulation.

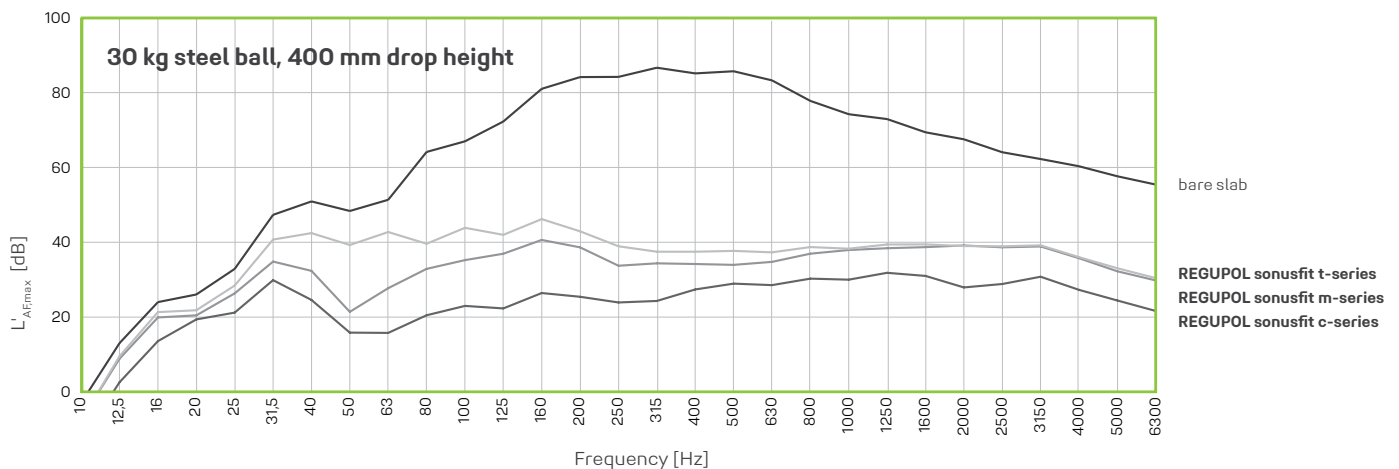
This is achieved by combining damping elastomers with **REGUPOL aktiv**, a long-proven surface for fitness applications.

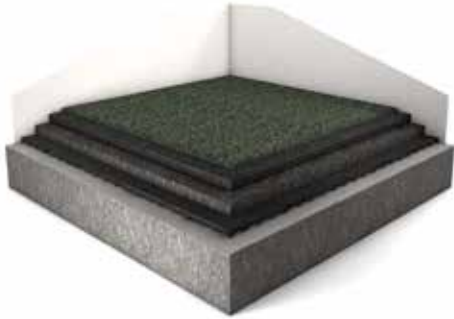
The impact on the subfloor from dropped weights is considerably reduced by the **REGUPOL sonusfit** systems. Simultaneously, the **sonusfit** safely allows for a wide range of exercises.

REGUPOL sonusfit at a glance

- Integrated fitness floor covering for gyms
- Perfect combination of acoustics and sport functionality
- Flexible design for various sound protection levels
- For retrofitting and new buildings
- Customized solutions possible

REGUPOL sonusfit compared



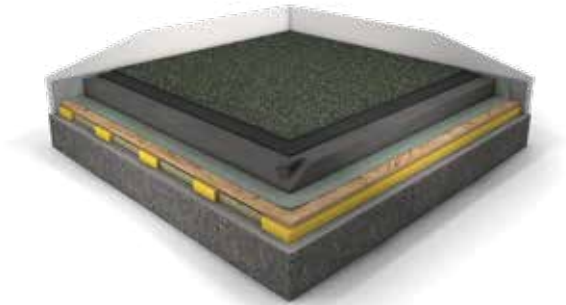


REGUPOL sonusfit m-series

The **REGUPOL sonusfit m-series** includes multi-layer systems. Elastomers with different damping and elastic properties are combined. **REGUPOL aktiv** is used as the top layer. This combination reduces structure-borne noise effectively, even without the use of a mass-spring system. Depending on the system, various stiffening layers are integrated in order to avoid impairing the stability of the athletes. The individual layers are laid on the subfloor or screed and glued together.

REGUPOL sonusfit c-series

The **REGUPOL sonusfit c-series** provides maximum flexibility regarding the acoustical design of the floor construction. The solutions can be adapted to the building project and designed to the desired target frequency. Both mass-spring systems with wet screed and dry screed can be implemented. This reflects the most effective method of isolating noise in gyms. In combination with the corresponding **REGUPOL sonusfit m-series** surface systems, the energy which the elastically supported screed has to bear is reduced, thus protecting the screed. Simultaneously, the functionality of the flooring is sustained.

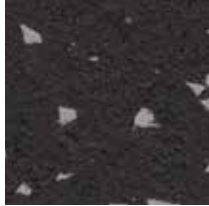


PERFORMANCE MEASURED IN BRILLIANT COLORS

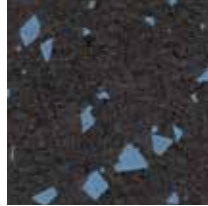
REGUPOL sonusfit essential



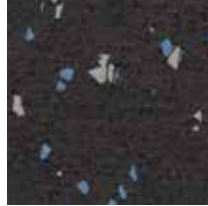
AK10100
Jet Black



AK10101
Gray Hound



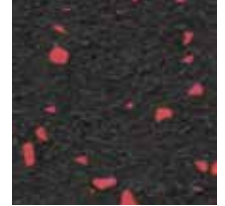
AK10102
Jayz Blue



AK10103
Blue Streak



AK10104
Titan Tan

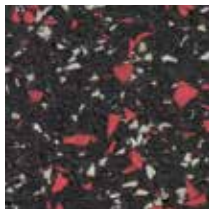


AK10109
Raging Red

REGUPOL sonusfit strength



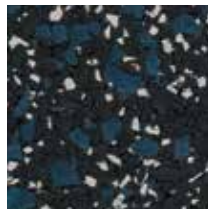
AK35100
Gray Ghost



AK35105
Red Devil



AK35107
Stormy Night



AK35109
Blue Devil

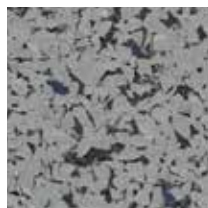
REGUPOL sonusfit intense



AK95102
Thunder Gray



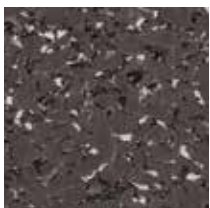
AK95105
Avalanche Gray



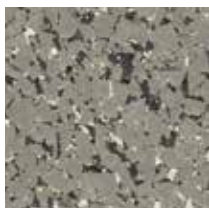
AK95132
Gotham



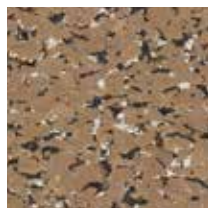
AK95134
Iron Den



AK95135
Backyard Scrum



AK95136
Silver Lining



AK95137
Cedar Fit

Custom Colors

Choose from a wide range of standard colors or invent your own. **REGUPOL** will combine our own vibrant EPDM color granules to create a custom color that matches your brand standards (minimum orders apply).

Contact us now! Our team would be glad to assist you.

(800) 537-8737 | sales@regupol.com

CUSTOM COLORS & LOGOS

The beauty of the **aktiv** surface is in its brilliant colors and cushioned comfort. Offering a safe, secure, and always attractive solution for tough environments. A range of standard colors is available along with options for custom color matching – meaning **Aktiv** can be your workhorse athletic surface while supporting your brand and complementing the aesthetics of your facility. Using our precision water-jet cutting, your logo, marketing or inspirational message can be incorporated into your floor. Contact **REGUPOL** for details.



RAL 1000
Tan



RAL 1001
Light Beige



RAL 1006
Gold



RAL 1011
Clay Brown



RAL 1012
Yellow



RAL 1013
Pearl



RAL 2004
Orange



RAL 3004
Wine Red



RAL 3016
Brick Red



RAL 3017
Bright Red



RAL 4005
Purple



RAL 5002
Bolt Blue



RAL 5013
Colbalt Blue



RAL 5014
Blue Grey



RAL 5015
Sky Blue



RAL 5018
Teal



RAL 5019
Capri Blue



RAL 5023
Blueberry



RAL 6011
Reseda Green



RAL 6017
Bright Green



RAL 6032
Signal Green



RAL 7006
Grey Beige



RAL 7015
Charcoal Grey



RAL 7022
Sambra Negro



RAL 7035
Light Grey



RAL 7037
Medium Grey



RAL 8014
Sepia Brown



RAL 8017
Chocolate Chip



RAL 8024
Brown



RAL 9004
Black



HOW ARE SOLUTIONS EASY AND INSPIRING? **TOGETHER**

We've got it covered.

REGUPOL is more than sports and multi-purpose surfaces. More than our acoustic underlayments. And more than our state-of-the-art track and field surfaces. For over 65 years, providing solutions and delivering exceptional customer service has been our business. We understand that paying attention to the details is critical from the start of any project. Making changes later means inconvenience and additional expenses. We sweat those details so you don't have to.

Because we invented the technology to recycle tires into unique products, you benefit from decades of experience and expertise that only we can offer. That means the right information, advice, and answers when you need them, along with products that have been refined, tested, and retested over the years by our R&D team to deliver precision performance that will not disappoint. It is all accomplished with manufacturing that meets the highest quality standards with the strictest environmental requirements.

Delivering results, developing leaders worldwide

We have grown steadily since 1954 – new products developed, new subsidiaries established and new locations added. Today, **REGUPOL** is still a family enterprise, with third and fourth generations currently working in company management. We have eleven offices in seven countries, all serving as epicenters for innovation, ingenuity, and community.

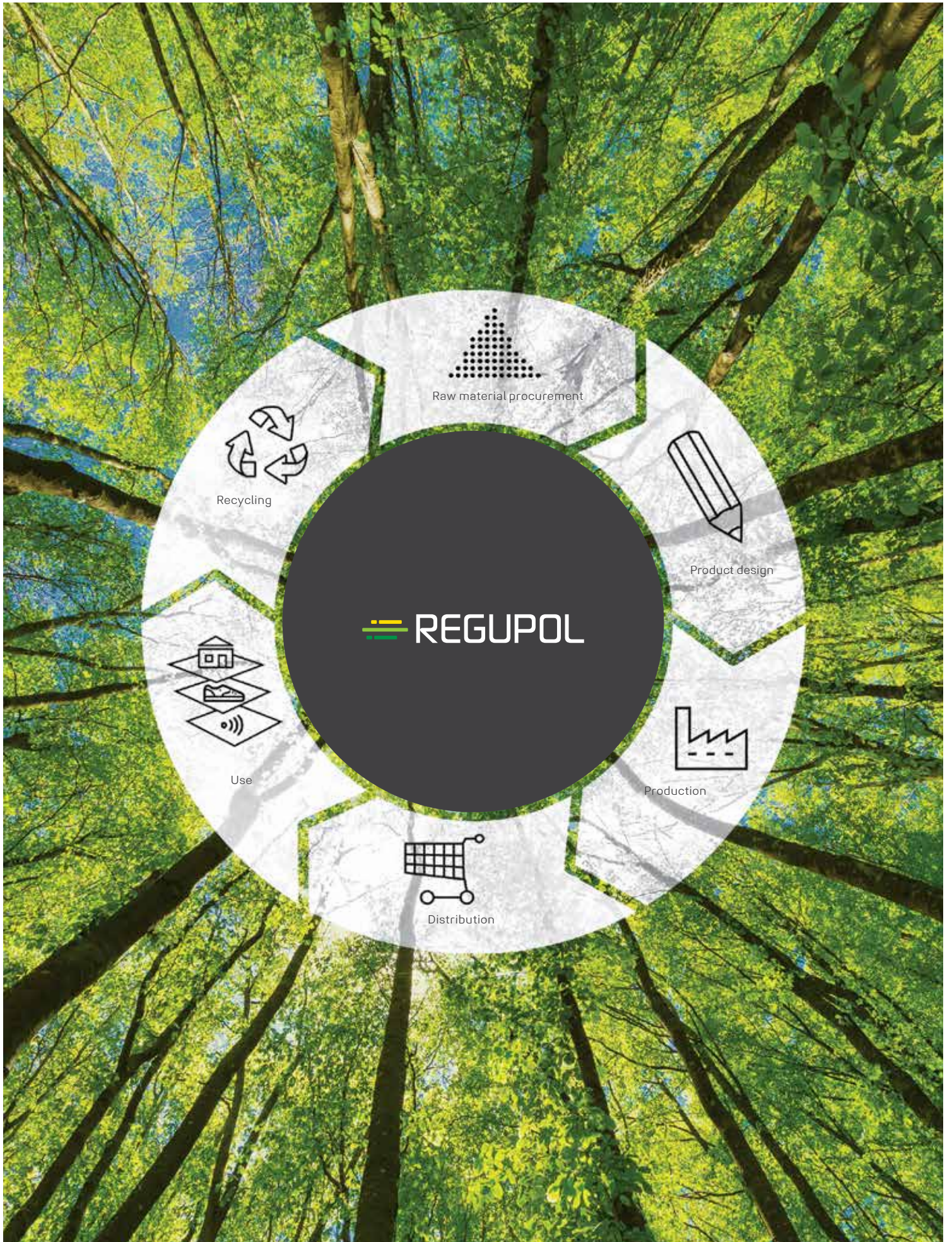
Behind every **REGUPOL** product, there is a talented team that works together, across the globe, to create performance solutions from reclaimed materials that deliver durability and protection where you need it most without sacrificing sustainability. Whether used to protect surfaces and optimize load transport or to dampen sound and vibration, **REGUPOL** gets it done. We deliver with a level of product, customer service, and investment that only the inventor can offer.

No matter the customer—we aim to make their experience easy and inspiring, at an only-at-**REGUPOL** value.

Customer service excellence for over 65 years.



Ask our experts about the optimal
Solution for your project:
sales@regupol.com | +1 800 537 8737



Raw material procurement



Recycling



Product design



Use



Production



Distribution

 REGUPOL

HOW TO ACT MORE SUSTAINABLE? TOGETHER

Caring about the environment is part of the REGUPOL core mission. When it comes to how we conduct our business and develop our products, we think long term. We ask ourselves: How will our actions today impact tomorrow's world? We strive to protect and sustain our environment every step of the way, from development and production to customer use and disposal.

On the road, tires eventually wear down or sustain irreparable damage. But, in the environment, tires can last forever. They are nonbiodegradable, unable to be compacted like plastic or metal, and maintain their shape. Because of their sheer size and impenetrable rubber compound, tires are among the most problematic sources of waste we face today.

Each year we reclaim over 9 million tires (or 90,000 tons of SBR) from landfills to make environmentally sound solutions for the sports, acoustics, commercial, construction, and transportation markets. Our products are comprised of either shredded and cleaned SBR tire rubber (100% post-consumer waste) or a combination of SBR tire rubber and vibrant EPDM (post-industrial waste) color granules. The recycled content ranges from 75% to 100% recycled materials.

We understand that sustainability is not only about material content, which is why our manufacturing facility is near our rubber supplier. By eliminating excessive fuel use created through transportation of resources, fossil fuel expenditures are minimized, and atmospheric damage reduced. We are practically a zero-waste manufacturer regrinding our scrap material for use in some of our products.

There is an increasing demand for honesty and transparency from manufacturers. We were the first Pennsylvania manufacturer to be GreenCircle Certified. They provide independent verification of our products annually to ensure the legitimacy of our recycled content claims. But our commitment to sustainability does not end there; we've gone one step further. We work with UL Environment to independently certify our Environmental Product Declaration (EPD) to better understand and communicate the sustainable qualities and the life-cycle impact of our products.

Products used in the built environment should meet specific criteria for the health and safety of all occupants. These are called Health Product Declarations (HPDs) and are the standardized way of reporting the contents of building products. It is a valuable tool for not only encouraging transparency, it creates a sense of brand trust and is safer for anyone using the property. We make HPDs readily available for our family of brands including **aktiv**, **sonus**, and **Revolution**.

We are active USGBC members and our products can potentially assist architects and designers in earning points under 2 out of 9 categories—Materials and Resources and Indoor Environmental Quality—of LEED certification v4.1.





700

Employees

11

Locations worldwide

90,000

Tons of high quality rubber per year

132

Countries served worldwide



HOW DO YOU GROW TO THE TOP? **TOGETHER**

When you partner with REGUPOL, you become part of a community with a shared goal of leading with excellence and innovation. Our path to success has always been rooted in product innovation and great service, with an eye on the future. We transform over 90,000 tons of high-quality rubber every year to create products that meet and exceed industry standards.

Over the course of our 65-year journey to become a leader in our category of building materials, we have built up a wealth of expertise and forged long-term customer partnerships in 132 countries worldwide—like sprint legend Usain Bolt, who made history on our blue **REGUPOL** running track in Berlin's Olympic Stadium in 2009 when he set two world records.

“There's nothing like running on REGUPOL. To me, REGUPOL equals gold. In more ways than one.” – Usain Bolt

We've got it covered.



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REGUPOL Australia Pty. Ltd.

REGUPOL Acoustics Middle East FZE

REGUPOL Schweiz AG

REGUPOL Zebra Athletics LLC

BSW Shanghai CO. LTD.

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