MARCH 2025

SAVA NEWSLETTER



SUSTAINABILITY IN THE PVC INDUSTRY: A CONTINUED COMMITMENT

With the recent INC-5 conference still fresh in our minds and the anticipation of INC-5.2 later this year, the vinyl (PVC) industry remains steadfast in its commitment to sustainability.

The demand for sustainable materials continues to grow, and the PVC industry is evolving to meet these expectations. Through responsible manufacturing practices, innovative recycling initiatives, and industry collaboration, we are ensuring a greener, more sustainable future.

PVC is a vital material across various industries, from infrastructure and construction to healthcare and packaging. Its durability, recyclability, and versatility make it a responsible and long-term choice.

The Southern African Vinyls Association (SAVA) and its members are dedicated to advancing PVC sustainability, promoting responsible manufacturing, and supporting innovative recycling projects. Our ongoing efforts focus on ensuring the safe use of vinyl while driving progress in sustainability and environmental responsibility.

In this month's newsletter, we delve into SAVA's latest initiatives, including the collection and recycling of post-consumer PVC packaging, our Product Stewardship Commitment, progress on the vinyl floor recycling and recovery project, and exciting updates on our upcoming industry events.

Stay informed and engaged as we continue to drive positive change in the PVC industry!









A COLORADOR OF COLORADOR **PVC PIPES & FITTINGS PROVIDING CLEAN DRINKING WATER** FOR COMMUNITIES IN SOUTH AFRICA AND BEYOND

As the world celebrates World Water Day on 22 March 2025, the spotlight once again turns to the importance of reliable and safe water infrastructure. In South Africa and globally, polyvinyl chloride (PVC) pipes and fittings play a critical role in delivering clean, potable water to millions of people, ensuring that communities have access to safe drinking water.

PVC Pipes: A Proven, Safe, and Reliable Solution

PVC has long been recognised as one of the most durable and cost-effective materials for water infrastructure. With their long lifespan, corrosion resistance, and minimal maintenance requirements, PVC pipes provide a sustainable and efficient solution for water distribution networks.

One of the recurring concerns about PVC pipes has been the potential for vinyl chloride leaching. However, recent studies have once again confirmed that PVC water pipes do not leach vinyl chloride. Independent testing and fundamental chemistry reaffirm that vinyl chloride-a gaseous compound used in the production of PVC-does not leach from finished PVC pipes into drinking water.

to a recent article published on Water According Finance & Management (www.waterfm.com) scientific research continues to dispel misinformation surrounding PVC water pipes. The report emphasises that PVC pipes are a safe and effective choice for drinking water systems, offering communities peace of mind when it comes to water quality and safety.

Supporting Water Security in South Africa

With ongoing water challenges in South Africa-ranging from aging infrastructure, water scarcity, and contamination risks-it is more crucial than ever to invest in sustainable and resilient water solutions. PVC pipes provide a reliable answer to these challenges, offering:

- Corrosion resistance Unlike metal pipes, PVC does not rust or degrade over time.
- Chemical safety Independent studies confirm that PVC pipes do not leach harmful substances into drinking water.

A Commitment to Clean Water for All

As South Africa joins the rest of the world in commemorating World Water Day 2025, it is essential to recognise and promote solutions that secure clean water access for future generations. PVC piping remains a trusted backbone of modern water distribution, ensuring safe, clean, and reliable drinking water for millions.

Source:

(https://www.waterfm.com/commentary-americans-deserve-accurate-information-about-pvc-pipe-fordrinking-water/),

SAVA's Product Stewardship Commitment Survey 2025: Reinforcing Industry Responsibility



The Southern African Vinyls Association (SAVA) is committed to sustainability and responsible environmental management within the PVC industry. As part of this commitment, the Product Stewardship Commitment (PSC) Survey for 2025 will soon be distributed to all SAVA members. This annual survey is a crucial tool in ensuring that the industry remains proactive in meeting environmental, regulatory, and consumer demands while contributing to a sustainable future.

What is the Product Stewardship Commitment (PSC)?

The PSC is a structured framework that encourages PVC manufacturers, suppliers, and processors to adopt best practices for sustainability. This ensures responsible manufacturing, usage, and disposal of PVC products in alignment with global standards. The key objectives of the PSC include:

- **Environmental Responsibility:** Encouraging the PVC industry to reduce its environmental footprint by promoting recycling and proper disposal methods, preventing unnecessary landfill waste.
- **Circular Economy Contribution:** Ensuring that materials remain in use for as long as possible, reducing dependence on virgin resources and minimising waste through effective recycling and reuse.
- **Regulatory Compliance:** Assisting the industry in meeting increasing government and environmental regulations, thereby avoiding penalties and maintaining market access.
- **Consumer Confidence:** Demonstrating to customers that the industry prioritises sustainability, fostering trust and reinforcing brand reputation.
- Industry Leadership: Positioning the PVC sector as a leader in sustainable practices by setting high standards in recycling, waste management, and responsible product design.
- Economic Benefits: Lowering production costs by recovering valuable materials, reducing reliance on raw materials, and creating new economic opportunities in recycling and repurposing.

The PSC Survey: A Commitment to Sustainability

SAVA's PSC survey is an online questionnaire that all members are required to complete annually. This survey serves as a declaration of each company's commitment to maintaining sustainable manufacturing processes, ensuring the responsible use of additives, supporting closedloop management, and promoting sustainability awareness.

Product Stewardship Stewardship Manufacture Development Design Concept

Key Focus Areas of the PSC



1. Sustainable Manufacturing

SAVA members commit to managing environmental, health, and safety aspects in the manufacturing and storage of PVC products, ensuring:

- Total VCM (Vinyl Chloride Monomer) emissions from vinyl production remain below 250g/mt for S-PVC and E-PVC.
- VCM content in final vinyl product applications does not exceed:
 - 5g/mt for S-PVC.
 - 10g/mt for E-PVC.
 - Ig/mt for food and medical applications (both S-PVC and E-PVC).
- Mercury-free vinyl production processes are used for all local and imported vinyl and compounds.

2. Sustainable Use of Additives

All signatories agree to:

- Avoid the use of harmful additives such as short-chain chlorinated paraffins, lead stabilisers, cadmium, hexavalent chromium, and Bisphenol A.
- Restrict the use of DEHP and DOP in high human-contact applications such as toys, medical devices (excluding blood bags), footwear, gloves, apparel, shower curtains, flooring, tablecloths, and domestic flexible hoses.
- Disclose additives used in PVC products upon request.

3. Closed-Loop Management

Members commit to responsible recycling practices, ensuring:

- End-of-life PVC products containing legacy additives are recycled responsibly.
- PVC products meet relevant performance and safety requirements.
- The health and safety of workers and consumers are prioritised.
- Products are not used in inappropriate applications.

4. Sustainability Awareness

Through the PSC, SAVA actively promotes awareness across the value chain to address sustainability challenges and drive positive change in the industry

Recognition: The GREEN TICK Product Label

SAVA members who successfully comply with the PSC will be awarded the prestigious GREEN TICK Product Label.

This mark of excellence signifies that the product:

- Meets international safety and quality standards.
- Complies with the industry's PSC requirements.
- Upholds sustainable manufacturing and responsible additive use.
- Supports closed-loop management and sustainability awareness.

The GREEN TICK Product Label provides consumers with peace of mind, assuring them that locally manufactured PVC products align with global best practices

Commitment to a Sustainable Future

SAVA and its members remain steadfast in our mission to ensure that the PVC industry operates with responsibility, innovation, and a strong focus on sustainability. By participating in the PSC Survey 2025 and upholding the commitments outlined, members contribute to a more sustainable and reputable PVC industry in Southern Africa.

For more information on the PSC and how to participate, please contact SAVA via email at Admin@savinyls.co.za or visit our website (www.savinyls.co.za)

Closing date for completed surveys is 30 March 2025.

SAVA'S VINYL FLOOR COLLECTION AND RECYCLING PROJECT TAKES OFF

The Southern African Vinyls Association (SAVA) is excited to announce that its Vinyl Floor Collection and Recycling project has officially taken its first steps. The first batch of SAVAbranded recycling bags has been delivered to participating flooring companies and contractors eager to contribute to this sustainability initiative, and the first bags filled with off-cuts are making their way to our participating recyclers.

SAVA continues to receive weekly inquiries about the programme, reflecting the growing industry interest in responsible waste management. These specially branded bags are distributed to installation teams, who are required to collect off-cuts generated during flooring installations. Once filled, the bags are returned to designated depots, where our recycling partners collect them for processing and re-use.

Membership Benefits and Funding the Future

To sustain and expand this initiative, we encourage flooring companies to join SAVA as members and take full advantage of this service. Membership will operate on a tiered system, with annual fees based on a company's turnover from PVC flooring sales. A portion of these membership fees will be allocated to fund the collection and recycling of flooring materials.

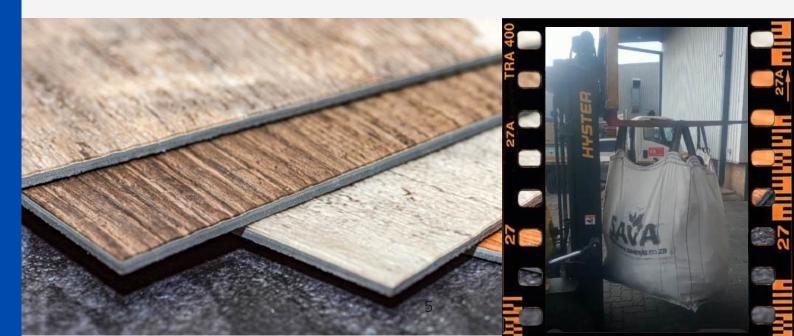
Additionally, SAVA is committed to supporting recyclers by assisting with the necessary infrastructure and ensuring they provide detailed reporting. This will help track progress and measure the environmental impact of the initiative.

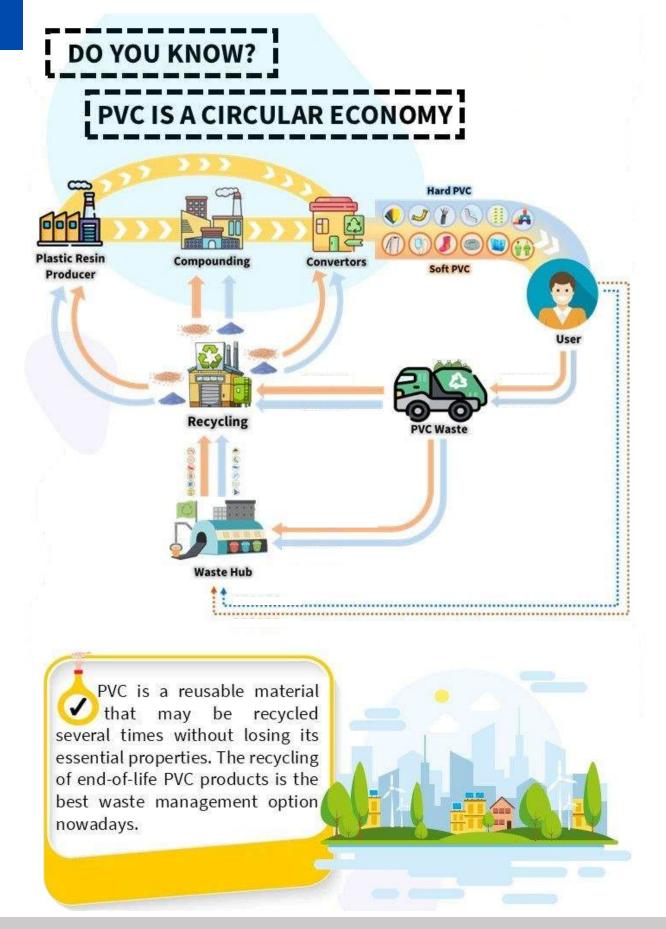
A Step Towards a Circular Economy

The ultimate goal of this project is to foster a circular economy by keeping valuable PVC flooring waste out of landfills. While the current focus is on collecting and recycling off-cuts, SAVA is actively exploring future solutions for handling rip-up flooring waste as well.

Every step toward sustainability counts, and collective effort from industry stakeholders is crucial to making this initiative a success. If your company is interested in joining the program, reach out to SAVA today and become part of the movement towards a cleaner, greener future.

For more information or to sign up, contact SAVA at CEO@savinyls.co.za or Admin@savinyls.co.za





PVC is a highly reusable material that can be recycled multiple times without losing its essential properties. This makes end-of-life PVC recycling one of the best waste management solutions today. By reprocessing PVC waste, we can significantly reduce landfill dependency, minimize incineration, and promote a sustainable lifecycle for plastic materials. Let's continue innovating and adopting circular economy principles to drive sustainability in industries that rely on PVC!

SA CONTINUES TO SEE STEADY GROWTH IN PVC RECYCLING

South Africa's commitment to sustainability and circular economy principles continues to drive significant progress in polyvinyl chloride (PVC) recycling. Despite difficult trading conditions, the latest data from Plastics SA reveals a notable increase in PVC recycling rates, reinforcing the industry's dedication to responsible waste management and environmental conservation.

In 2023, South Africa recycled an impressive 431,800 tons of plastic, marking a 17% increase from the previous year. PVC, known for its durability and versatility, has played a crucial role in this growth. While mechanical recycling remains the dominant method, new innovations and increased industry collaboration are expanding the potential of PVC recyclate in various applications, including flooring, footwear, wastewater pipes, and medical equipment.

Key Highlights of PVC Recycling in South Africa:

- **PVC recycling rates are on the rise**, contributing significantly to the country's overall plastic recycling performance.
- **Post-industrial waste remains the primary source** of recyclable PVC, with ongoing efforts to improve post-consumer collection and processing.
- Industrial applications such as cables, flooring, and rigid packaging continue to be the main end markets for recycled PVC.
- New initiatives in design-for-recycling and standardization are helping to improve collection systems and recyclate quality.

Recycling is driven by demand. While PVC packaging volumes remain relatively low, the market for recyclate is expanding. By improving collection systems and increasing awareness, we can further enhance recycling rates and reduce waste sent to landfills.

Overcoming Challenges for a Sustainable Future

Despite these achievements, challenges such as legacy additives in older products, contamination in flexible packaging, and insufficient collection of rigid packaging waste still pose obstacles to maximising PVC recycling. Addressing these issues through enhanced recycling infrastructure, industry-wide collaboration, and consumer education is essential for longterm success.

South Africa's recycling sector is making significant strides, but more efforts are needed to boost household collection rates, expand processing facilities, and strengthen end markets for PVC recyclate. Organizations such as SAVA (Southern African Vinyls Association) and Plastics SA continue to advocate for policies and initiatives that support sustainable waste management.



Proposed Standard Classification System and Basis for Specification for Pre- and Post- Consumer Recycled Rigid PVC and CPVC materials

Under the leadership of the Vinyl Institute (USA), a proposed Standard Classification System for Pre- and Post-Consumer **Recycled Rigid PVC and CPVC** materials is being developed. Its goal is to define a classification system for recycled rigid PVC and CPVC, improving communication and specifications between suppliers and buyers while addressing material uncertainty. This standard will support product design and performance standards, enabling greater use of recycled content and ensuring safe recycling endpoints. The initiative aims to enhance sustainability by reducing plastic waste in landfills and the environment.

This effort is part of a two-year project by a Vinyl Institute working group, coordinated through the D20.95 subcommittee. A second work item on flexible (plasticized) PVC will be pursued after finalising this first standard for rigid vinyl recycling.

Join our PVC Recyclers WhatsApp Group

If you are a PVC recycler and want to be kept in the loop about available material, please send your number to **0710835219** to be added to the PVC Recyclers WhatsApp Group.





The PVC Transformation: Driving Progress in a Changing World PVC INDUSTRY

CONFERENCE

Thursday, 14 August 2025 Sasol Head Office, JHB

SAVA Announces 2025 PVC Industry Conference: Call for Papers

Building on the success of our 2023 "Innovation in PVC" conference, the Southern African Vinyls Association (SAVA) is excited to announce that we will be hosting our next industry-specific conference on Thursday, 14 August 2025, at the Sasol Head Office in Katherine Street, Sandton.

This year's theme, **The PVC Transformation: Driving Progress in a Changing World,** will focus on the challenges facing the PVC industry both locally and globally, as well as new developments that will help to future-proof the industry.

Who Should Attend?

The conference is aimed at professionals across the South African PVC industry, including recyclers, brand owners, retailers, government representatives, academics, researchers, and other key decision-makers.

A final line-up of presenters, the conference programme, and sponsorship opportunities will be communicated in due course. This event is an invaluable opportunity to showcase your company to key stakeholders, share insights that shape the industry's future, and engage in meaningful discussions that will keep the industry aligned with the evolving landscape.

For more information about the conference, speaking opportunities, exhibitions and sponsorships please email **Conference@savinyIs.co.za**

SAVA is inviting the submission of papers that explore the following topics and more:

- Advancements in PVC additives and processing technology
- Challenges and opportunities in PVC
 recycling
- Innovations driving market growth and applications
- New additive technologies for enhanced durability and performance
- Regulatory compliance and future policy trends
- Advances in stabilisers, flame retardants, and pigmentation
- Innovation in flexible PVC and plastisols
- Market trends and evolving consumer preferences
- Environmental stewardship in the PVC sector
- Lean manufacturing and Industry 4.0 in
 PVC processing

If you are interested in presenting a 30minute paper on any of these or other relevant topics, please complete the call for papers questionnaire below.

Deadline for submissions: 30 April 2025.

To access the Call for Papers form, please click on https://forms.gle/Q87LBCBrwMkaWAz1A

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Important Update on PVC Cling Film Compliance with EU 10/2011 Standards

SAVA recently commissioned independent compliance testing on a sample of imported PVC cling film. The objective was to assess its adherence to the European Union's Commission Regulation (EU) No 10/2011, which governs plastic materials intended for food contact.

Overview of EU 10/2011 Standards

Commission Regulation (EU) No 10/2011 establishes specific migration limits (SMLs) and overall migration limits (OMLs) for substances in plastic materials that come into contact with food. These limits are designed to ensure that any potential transfer of substances from the plastic to the food remains within safe boundaries, thereby protecting consumer health.

Use of Isooctane as a Food Simulant

In compliance with EU 10/2011, isooctane (referred to as food simulant D2) is used to mimic fatty foods during migration testing. Isooctane is a stringent solvent, often resulting in higher migration values compared to actual foodstuffs. To account for this, correction factors are applied to align test results more closely with real-world conditions.

Test Results and Interpretation

The laboratory report indicated that the imported PVC cling film sample exhibited an overall migration value of 8.36 mg/dm² when tested with isooctane at 20°C for 2 days. This value is below the EU 10 mg/dm² limit, suggesting compliance.

However, this assessment incorporates a correction factor of 2. Moreover, it's crucial to note that the appropriate correction factor varies depending on the type of food the cling film contacts:

- **Correction Factor 1:** Applied to fatty foods such as butter, margarine, and oils. For these items, the unadjusted migration value exceeds permissible limits, indicating non-compliance.
- **Correction Factor 2:** Applicable to foods like cheese and pastries. With this factor, the migration levels meet compliance standards.
- **Correction Factor 3:** Used for foods with lower fat content, where migration levels are typically within acceptable ranges.

The imported PVC cling film sample we tested seem to be non-compliant with certain foodstuff. For this reason SAVA strongly advocates that retailers and end-users only use PVC cling film produced by SAVA members, identifiable by the Green Tick product label. This mark signifies compliance with our rigorous standards as set out by our Product Stewardship and Cling Film Compliance Initiative - thereby ensuring consumer safety and product quality.

SAVA's Product Stewardship Commitment and Cling Film Compliance Initiative

SAVA's Cling Film Compliance Initiative mandates that member-produced cling film:

- Meets SAVA and/or British Retail Consortium (BRC) standards.
- Is free from harmful additives and plasticisers.
- Maintains full traceability throughout the production process.

For detailed information on our compliance framework and a list of certified products, please visit our website or contact us directly.



INTRODUCTION TO PVC COURSE

🗰 6-7 March <u>2025</u>

Sasol Polymer Technology Centre, Modderfontein Fee for SAVA members: R2 000.00 + VAT Fee for Non-SAVA members: R2 500.00 + VAT



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More information (021) 531 - 0313



Admin@savinyls.co.za www.savinyls.co.za



Brabender Anton Paar

Promoting the versatility of vinyls in the media

SAVA's sister organisation in the USA, the Vinyl Institute (VI) does a great job of promoting the versatility of vinyls in the media. Below are a few of their recent posts as seen on LinkedIn.

In healthcare

Every time you enter a healthcare facility, you're likely to come into contact with multiple PVC products that keep you and the healthcare professionals safe.

PVC products are vital for safe healthcare delivery. <u>https://lnkd.in/eX9VQ3C5</u>



In outdoor spaces

In outdoor applications, few materials can claim to be as good as vinyl. PVC products last longer and withstand severe weather better than alternatives. <u>hashtag#ChoosePVC</u> <u>https://Inkd.in/egK7zep6</u>





In flooring

PVC products regularly outperform their competitors. Vinyl flooring is no exception.

Learn why vinyl floors outshine the competition: <u>https://lnkd.in/eZnNHUVm</u>



Meeting ESG Goals

PVC products are vital. Without them, communities worldwide wouldn't have clean water. Food would spoil faster. Homes would be built with higher carbon alternatives. Learn how PVC plays an important role: 11 <u>http://bit.ly/3WMELFf</u>

PROTECTING VINYL IN PACKAGING

DESPITE HIGH GROCERY PRICES AND A LACK OF SOUND SCIENTIFIC JUSTIFICATION, ACTIVISTS AROUND THE U.S. ARE PUSHING A NARRATIVE THAT SOME PACKAGING PRODUCTS SHOULD BE RESTRICTED FROM USE.

These proposals threaten the availability of certain everyday products, leaving consumers to face higher costs and fewer choices as manufacturers are subjectively forced to make changes in their product lines that would either lower the performance expectations of their products, or push them out of the market altogether.

- Polyvinyl chloride ("PVC" or "vinyl") is an inert and safe material and is not considered to be a toxic substance by any credible regulatory authority anywhere in the world.
- Eliminating PVC packaging would be illogical and unjustified. Absent any assessment of alternatives or building consensus through an open and science-based process, consumers would suffer negative health, safety, and economic consequences.
- Some of the uninformed concerns expressed as a rationale for banning PVC packaging revolve around upstream production and use of vinyl chloride, which is a gas that is completely transformed in the highly regulated process used to make PVC resin. Its presence is near-zero in finished PVC products.
- All of these efforts to ban specific materials like PVC in packaging come with exemptions, such as health care and pharmaceuticals. The very fact that policy makers with an anti-PVC bias are including exemptions for life-saving measures make the case for PVC's safety record. PVC is commonly used in applications where alternatives have been proven to be subpar and unacceptable.
- Chemical and resin bans do not belong in packaging EPR legislation. Extensive science-based testing forms the basis of decisions regarding what kinds of chemistry and at what levels can be safely used in packaging. Proposals that declare a list of chemistries to be banned from packaging oversimplifies and exaggerates both the stated problem and the proposed solution, all at the cost and risk to consumers.

www.vinylinfo.org



PVC is an excellent material for packaging because it is safe, sturdy, economical, easily manufactured, and environmentally responsible. Flexible vinyl is used for packaging applications with high performance requirements, such as:

- Blood bags to preserve blood supply longer
- Clear wrap to preserve meat and other foods
- Jar and bottle lid liners to preserve freshness and prevent contamination
- Can lining to preserve and protect food and beverages
- Commercial shrink films to keep hospital linens clean before use
- Industrial shrink films to protect goods during shipping and handling
- Tamper-resistant security and safety packaging and over-thecounter medications and supplements





FOR LEARNING & DEVELOPMENT RECYCLING COURSE



Did you know that the Plastics SA Academy for Learning and Development has a special recycling course available, with a specific focus on PVC available? The programme is presented on demand over a period of 2 days of training or 3 days optional. Cost is a daily rate of R2 212 for SAVA members. The course contents includes:

Introduction to Recycling (1½ hrs)

- Growth of plastics industry and plastics disposal
- Terminology: Virgin materials, regrind, etc

Plastics SA Academy

- Plastics processes: Injection moulding, Blow moulding, Pipe extrusion, Film extrusion, Sheet extrusion, Recycling
- Recycling plant: Shredder, Granulator, Silo, Extruder, Die, Cutter, Screen, Drier, Silo
- Course outline and Administration

Materials (4 hours)

- What are plastics and where does it come from
- Advantages and Disadvantages
- Basic chemistry
- Thermoplastics and Thermosets
- Degradation
- Materials used by M&H
- Coding
- Handling tips: Housekeeping and materials handling

Collection, Separation, Granulation and Washing

Collection: Care, Logistics, Economics Separation: Miscibility, Metal detection, Densities Granulation: Shredding Screen hole size Knife wear Washing and Drying Conveying and Storage

Composition of an Extruder (3 hrs)

Feeding system, barrel, heating and cooling, thermocouples, screen changer, Screw, Vent, Instrumentation

Functioning of an extruder (2 hrs)

- Feeding the machine: Mixing
- Feed zone
- Compression zone
- Metering zone
- Vent zone
- Recompression zone
- Second metering zone
- Effects of adjustments: Barrel temperatures, Screw speed, Cutter speed

Tooling (2 hr)

- Dies
- Temperature control of dies
- Cleaning of dies

Pelletising (3 hrs)

- Cold pelletising: Cooling, Drying, Strand chopper, Screening, Conveying
- Hot pelletising: Hot melt pelletiser, Cooling (Air and Water), Vibratory screening, Drying, Conveying
- Weighing and Bagging

QualityAssurance (2 hrs)

- Appearance: Colour, Contamination, Longs and Shorts, Flakes and fines, Lumps, Porosity
- Granule flow
- Melt Flow Index
- Basic faultfinding and Rectification

Start up and Shut down procedures (2 hrs)

- Pre-extrusion check list
- Start up procedures
- Shut down procedures
- And much more!

Remember that SAVA members receive a special discount! For more information please email Renée.McLean@plasticssa.co.za or call her on (011) 653 4797

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in @SAVinyls



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