ABOUT PVC4CABLES

PVC4Cables is the ECVM’s platform dedicated to the PVC cables value chain. It brings together the producers of PVC resins, stabilisers and plasticisers. It is open for participation by PVC compounders and PVC cables producers.

PVC4Cables intends to act as a driver for environmentally responsible innovations in the PVC cables sector and as a focal point for dialogue and communications with all stakeholders: compounds and cable producers, regulators, specifiers, installers, electricians, media and the general public.

Objective of the initiative is to proactively engage in the promotion of PVC cables, highlighting their contribution to sustainable development and to the circular economy, as well as their numerous technical and functional benefits for final users and consumers.

10 REASONS TO CHOOSE PVC CABLES

VERSATILITY OF FORMULATIONS

excellent flexibility, transparency, easy to colour and lightness

PROCESSABILITY

easy to extrude, excellent productivity

CO-EXTRUSION

PVC can be co-extruded in multi-layer cables with excellent cost/performance ratio

RESISTANCE TO TEMPERATURE

very wide range, from -40° to 125°

RESISTANCE TO ATMOSPHERIC AGENTS AND UV RADIATIONS

RESISTANCE TO HYDROCARBONS

for example, oil and gasoline

INSULATION

PVC presents an inherently high value of the insulation coefficient

SELF-EXTINGUISHING

PVC is by nature a flame retardant and does not generate flaming droplets

FIRE RESISTANCE

PVC is difficult to ignite, has a moderate heat release and produces very little smoke

RECYCLABILITY OR REUSE

most of the PVC cables is recycled

ECVM (The European Council of Vinyl Manufacturers - www.pvc.org) is the organisation representing leading European PVC resin manufacturers, accounting for about 90% of the PVC resin produced in the EU.

A founding member of VinylPlus®, ECVM is committed to sustainable development, and to address and promote health, safety and environmental best practices over the PVC life cycle.
PVC CABLES IN A CIRCULAR ECONOMY

In a circular economy, the value of the products, materials and resources is kept as long as possible, the production of waste is minimised and innovation is at the centre of the entire value chain.

As outlined by the European Commission, this can be achieved in various ways, for example:

- reducing the quantity of materials required to deliver a particular service (lightweighting),
- increasing the useful life of the products (durability),
- reducing the consumption of energy and materials during production and use (efficiency),
- reducing the use of substances or processes which create barriers for recycling (substitution).

With the VinylPlus® sustainability programme (www.vinylplus.eu), the European PVC industry is well positioned to steadily moving towards a true model for circular economy.

The circular economy encompasses the concept of ‘doing more with less’; in other words, create more value with less environmental impact and higher economic performance.

PVC CABLES RECYCLING

PVC cables are recyclable and successfully recycled. Thanks to the collection and recycling schemes set up by producers, battery cables and non-ferrous metals (copper) are recovered. PVC recycling from cables reached 127,214 tonnes in 2016 from nearly seven in 2000.

DOING MORE WITH LESS

PVC is intrinsically a ‘low carbon’ plastic; 50% of its weight is chlorine (57% of its molecular weight is chlorine). PVC is intrinsically a ‘low carbon’ plastic — a solvent-based technology which allows to recycle difficult-to-treat PVC waste and to produce high-quality, virgin-like R-PVC compounds. The process is originally introduced by VinyLoop® and more sophisticated mechanical recycling technology is represented by the VinyLoop® process and more sophisticated mechanical recycling technology - a solvent-based technology which allows to recycle difficult-to-treat PVC waste and to produce high-quality, virgin-like R-PVC compounds. The process was originally introduced by VinyLoop® and more sophisticated mechanical recycling technology.

The VinyLoop® initiative is a member of the VinylPlus® initiative, which has the primary goal of enhancing the efficiency of materials used.

Studies and tests show that, due to its intrinsically self-extinguishing characteristics, PVC does not contribute to flame propagation and does not generate flaming droplets. Unlike odourless toxic gases, such as carbon monoxide that is by far the most hazardous element in a fire, the presence of hydrogen chloride generated by PVC combustion can deter or totally harm rescue levels, due to its distinctive smell. As such, the emission of HCl gas at an early stage of a real fire situation, it is difficult to ignite and does not sustain combustion. PVC does not contribute to flame propagation and does not generate flaming droplets.

PVC CABLES APPLICATIONS AND MARKET

PVC is used for the production of any type of electric and data transmission cables and as insulation and/or sheathing in various fields: classic electric cables for power transmission at medium and low voltage for homes and offices, telephone cables, cable television (CATV) cables, telecommunications cables, data transmission cables, LAN and IT. PVC cables are compliant with the CE mark.

The PVC value chain is engaged in the research and development of new formulations to ensure maximum safety and protection of the environment and the health of users and consumers. VinylPlus® commitment on the sustainable development of PVC in the complete replacement of lead-based stabilisers in PVC applications in the EU-28 by the end of 2015, whilst European plasticiser producers continued to adapt and change their products to legislation and to the evolving demands of the market. New formulations for PVC cables are currently under development to further improve their performance in fires.

Stability and Agility

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