



## PVC Modifiers & Products Benefits

- EVA-g-VC, EVA-g-MMA - The most effective modifier of the hardness for rigid PVC
- EVA-g-VC, EVA-g-MMA- Non-migrant, non-volatile and Ecological.
- PVC-g-BA - Internal plastification, resistance to UV and heat resistance
- PVC-g-BA - Improves shock resistance and frost resistance.
- PVC-g-BA - Improves Processability.
- PVC-g-BA - Excellent weather resistance.
- PVC-g-VA - Increases the resistance to UV and heat resistance.
- PVC-g-VA - Improves shock resistance and frost resistance.
- PVC-g-VA - Lamination of aluminum profiles of steel.
- SBS-g-MMA -Improves shock resistance and frost resistance
- SBS-g-MMA -Prevents the migration of liquid plasticizers.
- CPE-g-GMA, MBS-g-GMA , ABS-g-GMA, SEBS-g-GMA – Impact modifier

Modified PVC used in a wide range of applications as follow; exterior-building materials (window frames, siding), industrial boards, impact-resistant waterproof tubes, packaging of rigid PVC (blistering, caps-covers, bags), protective films, electrical parts (connectors)

EVA-g-MMA terpolymer-ethylene vinyl acetate and methyl methacrylate (up to 3%).

EVA-g-VC terpolymer-ethylene-vinyl acetate and vinyl chloride (up to 3%).

PVC-g-BA graft copolymer of polyvinyl chloride and butyl acrylate (up to 3%).

PVC-g-VA graft copolymer of polyvinylchloride and vinyl acetate (up to 5%).

SBS-g-MMA graft copolymer-styrene thermoplastic elastomer (up to 5%).

# Applications

- Property modification of PVC products by Polymer Modifiers since PVC has a high polarity and high compatibility with a variety of other high-performance plastics, it is possible to mix these easily to form polymer alloys. By polymer alloying techniques some of the shortcomings of rigid PVC products can be modified
- Impact Resistance Impact modifiers (toughening agents) which have rubber-like properties such as ABS, MBS, acrylic rubber, chlorinated polyethylene or EVA, are mixed with PVC. Sufficient impact resistance for practical use can be obtained by blending 5~20 weight parts of these impact modifiers to 100 weight parts of PVC
- Heat distortion temperature (softening temperature) PVC with enhanced heat resistance is used for heat resistant rigid PVC pipes, such as hot water supply pipes or electric cable protecting tubes, and instrument panels of vehicles. On the other hand, soft PVC products with modified heat resistance can be manufactured by blending with a high-polymer plasticizer. Such products are used for heat resistant cable covering and other applications.
- Prevention of plasticizer bleed and volatilization plasticizer free flexible PVC products are manufactured as in the case of graft polymerized EVA (ethylene vinyl-acetate copolymer) and PVC including plasticizers which do not migrate or bleed at high temperatures is used for electric/ electronic parts and heat resistant cables. Some of the non-migrating type plasticizers are used for medical bags/tubes or industrial hoses

