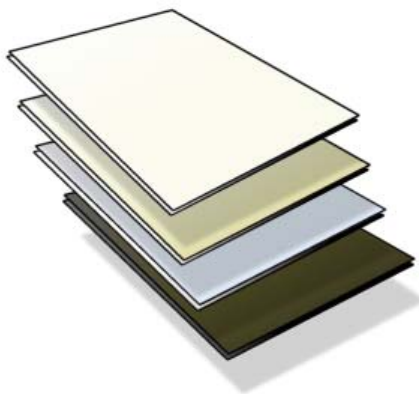




*Innovative plastics  
applications*

# AMARGO<sup>®</sup>

PE HD, PP-H, PP-C Sheets



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# Sheets, PEHD Foils

## Product Characteristics and Applications

- PEHD sheets are made from high density polyethylene. The sheets are used for manufacturing various tanks for the chemical industry, small sewage treatment plants, separators, warehouse containers etc. Polyethylene sheets are aggressive media resistant.
- It is possible to manufacture any colour sheets with an anti UV stabilizer.
- Polyethylene sheets are more resistant against forces (impacts, flexibility) than the polypropylene ones. That is why we recommend them for outdoor applications.
- Owing to their flexibility, the sheets may be used in a thermal moulding technology.
- Application designing and manufacturing various components on the basis of polyethylene sheets guarantee long-term failure-free usage.
- It is possible to protect PEHD sheets against scratch by means of a special foil.
- Optionally, we offer manufacturing sheets with an antislip layer.

## Sheet Processing and Joining

- Polyethylene sheet processing is similar to wood treatment.
- It is possible to join polyethylene sheets — they may be butt welded, hot air welded (with or without filler material) or joined mechanically (e.g. by means of stranding).

## Packing, Transport, Storage

- The sheets are packed in palettes, protected by means of protective sheets and strapped.
- It is recommended to store sheets far from direct heat sources.
- It is recommended to store sheets without UV protection in closed rooms.

## Waste Material Utilization

- It is possible to recycle in full polyethylene sheet processing waste materials.
- Recommended utilization technologies: milling and regranulation.

## Production Assortment

- According to the product index enclosed.

## Technical Information

- Density 960 kg/m<sup>3</sup>
- Yield point elongation ratio (according to EN ISO 527): minimum 8%
- Elasticity ratio (according to EN ISO 527): minimum 700 MPa
- Yield point stress (according to EN ISO 527): minimum 17 MPa
- Rupture elongation ratio (according to EN ISO 527): minimum 600 %
- Charpy impact strength +23°C (according to EN ISO 179): 12 kJ/m<sup>2</sup>, -30°C: 4.5 kJ/m<sup>2</sup>
- Sheet production standard: PN 007-64, EN ISO 14 632
- Flammability class — normal

# PP-C Sheets

## Product Characteristics and Applications

- Block propylene-ethylene copolymer is used for PP-C sheet extruding. Owing to this fact it is possible to obtain high elasticity ratio products.
- The sheets are used for manufacturing various tanks for the chemical and food industry, agriculture, constructing small sewage treatment plants, separators, warehouse containers, basins etc.
- PP-C sheets are aggressive media resistant.
- It is possible to manufacture any colour sheets with an anti UV stabilizer.
- Designing and manufacturing various components on the basis of polypropylene sheets guarantee long-term failure-free usage.
- It is possible to protect offered sheets against scratch by means of a special foil.
- Optionally, we offer manufacturing sheets with an antislip top layer.

## Sheet Processing and Joining

- Polypropylene sheet processing is similar to wood treatment.
- It is possible to join the sheets — they may be butt welded, hot air welded (with or without filler material) or joined mechanically (e.g. by means of stranding).

## Packing, Transport, Storage

- The sheets are packed in palettes, protected by means of protective sheets and strapped.
- It is recommended to store sheets far from direct heat sources.
- It is recommended to store sheets without UV protection in closed rooms.

## Waste Material Utilization

- It is possible to recycle in full polypropylene sheet processing waste materials.
- Recommended utilization technologies: milling and regranulation.

## Production Assortment

- According to the product index enclosed.
- Optionally, we offer B1 flammability class sheets — according to DIN 4102

## Technical Information

- Density 920 kg/m<sup>3</sup>
- Elasticity ratio (according to EN ISO 527): minimum 1000 / 1100 (bending / tension) MPa
- Yield point stress (according to EN ISO 527): minimum 25 MPa
- Shore hardness (according to EN ISO 868): 58
- Charpy impact strength +23°C (according to EN ISO 179): minimum 50 kJ/m<sup>2</sup>, -30°C: minimum 8 kJ/m<sup>2</sup>
- Sheet production standard: PN 006-64, EN ISO 15 013
- Flammability class — normal

# PP-H Sheets

## Product Characteristics and Applications

- Polypropylene homopolymer is used for PP-H sheet extruding. The homopolymer is health harmless and allowable for food contact.
- PP-H sheets are used for manufacturing various components and tanks for the chemical and food industry, warehouse containers etc.
- PP-H sheets are aggressive media resistant.
- It is possible to manufacture any colour sheets with an anti UV stabilizer.
- Designing and manufacturing various components on the basis of polypropylene sheets guarantee long-term failure-free usage.
- It is possible to protect offered sheets against scratch by means of a special foil.
- Optionally, we offer manufacturing sheets with an antislip top layer.

## Sheet Processing and Joining

- Polypropylene sheet processing is similar to wood treatment.
- It is possible to join the sheets — they may be butt welded, hot air welded (with or without filler material) or joined mechanically (e.g. by means of stranding).

## Packing, Transport, Storage

- The sheets are packed in palettes, protected by means of protective sheets and strapped.
- It is recommended to store sheets far from direct heat sources.
- It is recommended to store sheets without UV protection in closed rooms.

## Waste Material Utilization

- It is possible to recycle in full polypropylene sheet processing waste materials.
- Recommended utilization technologies: milling and regranulation.

## Production Assortment

- According to the product index enclosed.
- Optionally, we offer B1 flammability class sheets — according to DIN 4102

## Technical Information

- Density 910 kg/m<sup>3</sup>
- Elasticity ratio (according to EN ISO 527): minimum 1200 / 1500 (bending / tension) MPa
- Yield point stress (according to EN ISO 527): minimum 30 MPa
- Shore hardness (according to EN ISO 868): 68
- Charpy impact strength +23°C (according to EN ISO 179): minimum 7 kJ/m<sup>2</sup>, -30°C: minimum 2 kJ/m<sup>2</sup>
- Sheet production standard: PN 006-64, EN ISO 15 013
- Flammability class — normal

# PP-FOAM Sheets

## Product Characteristics and Applications

- Polypropylene homopolymer is used for PP-FOAM sheet extruding. The homopolymer is foamed additionally.
- Owing to carefully selected additions the material is foamed uniformly and demanded technical parameters and weld strength are always met.
- Owing to the fact that an identical raw material is used, high quality of welds with PP-C, PP-H sheets is guaranteed.
- It is strongly recommended to use PP-FOAM sheets in the applications where high static strength is not needed, e.g. tank components, ventilation, barriers, partitions etc.

## Sheet Processing and Joining

- Polypropylene sheet processing is similar to wood treatment.
- It is possible to join the sheets — they may be butt welded, hot air welded (with or without filler material) or joined mechanically (e.g. by means of stranding).

## Packing, Transport, Storage

- The sheets are packed in palettes, protected by means of protective sheets and strapped.
- It is recommended to store sheets far from direct heat sources.
- It is recommended to store sheets in closed rooms.

## Waste Material Utilization

- It is possible to recycle in full polypropylene sheet processing waste materials.
- Recommended utilization technologies: milling and regranulation.

## Production Assortment

- According to the product index enclosed.

## Technical Information

- Density 750 – 830 kg/m<sup>3</sup>
- Elasticity ratio (according to EN ISO 527): minimum 1700 (tension) MPa
- Allowable stress (according to EN ISO 527): minimum 30 MPa
- Rupture elongation ratio (according to EN ISO 527): 8 %
- Sheet production standard: PN 006-64, EN ISO 15 013
- Flammability class — normal

# PP-TALK Sheets

## Product Characteristics and Applications

- PP-C plastic with a standard 10% talc addition is used for PP-TALK sheet extruding. Owing to the modification it is possible to obtain higher rigidity and strength. Material impact strength lowers.
- PP-TALK sheets are mainly used for manufacturing outdoor tank components well protected against impacts, where higher rigidity is demanded.
- PP-TALK sheets are numerous aggressive media resistant.
- It is possible to manufacture any colour sheets with an anti UV stabilizer. However, some product batches may differ in hue because of the given colour pigment absorption by talc.
- It is possible to protect PP-TALK sheets against scratch by means of a special foil.

## Sheet Processing and Joining

- PP-TALK sheet processing is similar to wood treatment.
- It is possible to join the sheets — they may be hot air welded (with or without filler material).

## Packing, Transport, Storage

- The sheets are packed in palettes, protected by means of protective sheets and strapped.
- It is recommended to store sheets far from direct heat sources.
- It is recommended to store sheets without UV protection in closed rooms.

## Waste Material Utilization

- It is possible to recycle in full polypropylene sheet processing waste materials.
- Recommended utilization technologies: milling and regranulation.

## Production Assortment

- According to the product index enclosed.

## Technical Information

- Density 1000 kg/m<sup>3</sup>
- Elasticity ratio (according to EN ISO 527): minimum 1600 / 1700 (bending / tension) MPa
- Yield point stress (according to EN ISO 527): minimum 24 MPa
- Flammability class — normal

# WALL UNITS

## Product Characteristics and Applications

- Wall units are made from propylene by means of the integrated moulding technology, preformed.
- The following wall element workmanships are available: colourless, white, black (other colours — TBA), stabilised or non-stabilised against UV.
- On Customer's demand it is possible to manufacture products from a recycled material.
- The following workmanships are available: MOD 20, MOD 25, MOD 25 VARIO — detailed description included in the catalogue sheets.
- Wall units are mainly used for manufacturing tanks, plating tanks, septic tanks, wells and other structures loaded permanently with chemical, corrosion and static loads. It is recommended to check all the component physical and mechanical parameters during new component application preparing and make all needed calculations in order to check if the given component may be applied.

## Joining

- It is possible to join wall units — they may be butt welded, hot air welded (with or without filler material) or joined mechanically (e.g. by means of stranding).
- VARIO wall elements may be cut longitudinally. A special mould construction (additional longitudinal rib) facilitates cutting.

## Packing, Transport, Storage

- Wall units are packed in palettes, protected by means of protective sheets and strapped.
- Product palettes shall be stored on an even base.
- It is recommended to store units without UV protection in closed rooms.

## Waste Material Utilization

- It is possible to recycle in full component processing waste materials.
- Recommended utilization technologies: milling and regranulation.

## Production Assortment

- According to the product index enclosed.

## Technical Information

- Density (accordingly to PIB): 826 kg/m<sup>3</sup>
- Elasticity ratio (according to EN ISO 527): 1347 / 1493 (bending / tension) MPa
- Yield point stress (according to EN ISO 527): 24.6 MPa
- Yield point elongation ratio (according to EN ISO 527): 7.5 %
- Average thermal elongation ratio (64 0528):  $122 * 10^{-6}/K$
- Shore hardness (according to EN ISO 868): 65
- Charpy impact strength +23°C (according to EN ISO 179): 18.1 kJ/m<sup>2</sup>, -20°C: 9.2 kJ/m<sup>2</sup>
- Flammability class — normal