

IRRADIATION CROSS LINKED POLYPROPYLENE FOAM



Irradiated crosslinked polypropylene foam-IXPP is mainly made of polypropylene, foaming agent and other additives through melt mixing and extrusion molding, then undergoes green and healthy ion radiation crosslinking through irradiation processing technology, It is formed through continuous high-temperature foaming and possesses an independent closed-cell structure.

IXPP foam has good thermal stability, cushioning and rebound properties, and can be widely used in industries such as automotive interior, aerospace, marine machinery, sports and leisure.

IXPP

Features

- ◆ Excellent high-temperature resistance, with a maximum service temperature of 120°C and good thermal stability.
- ◆ Excellent resilience, good cushioning and shock absorption, and outstanding impact resistance.
- ◆ has high closed-cell structure, with a closed-cell rate of over 98%, low water absorption, and low water vapor permeability.
- ◆ Excellent thermal insulation with a low thermal conductivity (<0.036w/m.k).
- ◆ Better chemical resistance compared to other foam materials.
- ◆ Environmentally friendly and harmless, with low odor, minimal VOC emissions.
- ◆ Superior processing performance, can be compounded, die-cut, thermoformed and vacuum-formed.



IXPP FOAM

Specifications & Technical

Ratio	5-30 Times
Thickness	1-6mm (single layer), 100mm (multi layer max)
Width	500-1500mm
Color	Flesh color, black (color support customization)

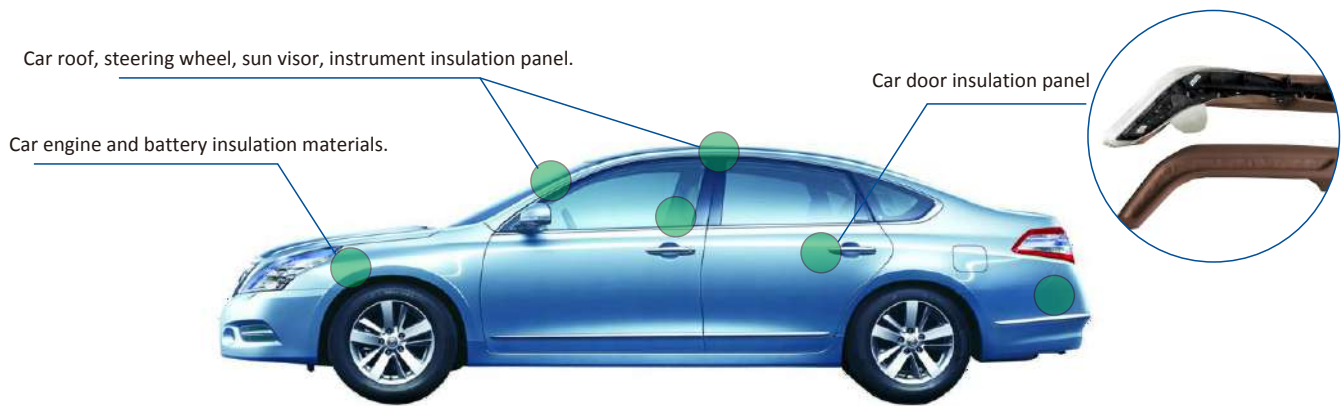
IXPP Foam Technical Specification									
Test item	Index							Test standard	
Ratio	5 Times	10Times	15Times	18Times	20Times	25Times	30 Times	/	
Density (kg/m ³)	200±25	100±10	66±7	55±5	50±5	40±5	33.3±3	GB/T6343	
Tensile strength (Mpa)	Transverse	≥2.5	≥1	≥0.9	≥0.7	≥0.6	≥0.4	≥0.2	GB/T6344
	Longitudinal	≥3.5	≥1.5	≥1.2	≥1	≥0.9	≥0.7	≥0.3	
Elongation (%)	Transverse	≥260	≥240	≥200	≥190	≥180	≥160	≥100	GB/T6344
	Longitudinal	≥320	≥270	≥260	≥230	≥220	≥210	≥200	
Tearing strength (kN/m)	Transverse	≥15	≥8	≥8	≥7	≥6	≥4	≥2	QB/T1130
	Longitudinal	≥18	≥9	≥9	≥8	≥7	≥5	≥3	
Size change rate(% ,120°C\1h)	Transverse	≤5	≤5	≤5	≤5	≤5	≤5	≤5	GB/T8811
	Longitudinal	≤-5	≤-5	≤-5	≤-5	≤-5	≤-5	≤-5	
Water absorption(%)	≤2	≤4	≤4	≤4	≤4	≤5	≤5	GB/T1034	

IXPP FOAM

Applicaton

Automobile

- ◆ IXPP foam has good thermal weldability, thermal processing performance and dimensional stability at high temperature (130°C), and can be used for steaming sand of car roofs, steering wheels, luggage compartment linings and air conditioners Damping panels, side guards, energy-absorbing protection pads for inner door panels, buffer pads, headrests, etc.
- ◆ IXPP is suitable for high-temperature applications, such as car roofs, air conditioner panels, and instrument insulation. It's commonly used as lining and damping material in high-end cars.
- ◆ IXPP can be used as a thermal insulation material for 90~120°C heat carrier cycle batteries and as an engine room heat insulation material.



Packaging

- ◆ Used in packaging applications, including foam packaging for electronic consumer goods and food containers.
- ◆ IXPP is an ideal material for personal packaging of computers, cameras, glassware, precision instruments, high-end items and vulnerable items.
- ◆ IXPP thermoformed food packaging containers are ideal for use as microwave utensils and as packaging material for microwaveable food.