

CEPRO IMPACT PLATE 3 MM

Description

Unlike flexible products like curtains and strips, CEPRO Impact plates are made of polycarbonate - a hard impact resistant material.

CEPRO IMPACT sections are available in two colours:

- CEPRO BRONZE
- CEPRO GREEN.

Application

The material may, for example, be used for separating a welding robot or as a window in a welding booth.

The two available colours comply with ISO EN 25980 standards and provide an excellent filtration against hazardous welding light and also offer protection against irritating but non-harmful welding light. They not only provide a better overview of the working area but also make it safer and do not isolate the welder from the rest of the working area.

Conditions for use

- Minimum usage temperature approx. -30 ° C.
- Maximum heat resistance approx. 140 ° C.
- Impact sections are designed to provide a \ visual protection and although they are flame retardant, they are unsuitable for protection against welding sparks.
- The material is not intended as a replacement for a welding window but to protect bystanders from the harmful rays in the welding area.

Characteristics

CEPRO Impact plates are made of polycarbonate and are 3mm thick.

Dimensions

The following standard dimensions are available:

2050 x 1250 mm, thickness 3mm

1025 x 1250 mm, thickness 3mm

CEPRO Impact sections can also be cut to the desired measurements.



CEPRO_PFS_PVC_Polycarbonate_rigid_welding_sheet_impact_1001evCheck our website for the latest version.

CEPRO IMPACT PLATE 3 MM



Certificate of Compliance

Herewith, ECS certifies that the product(s)

CEPRO Impact Bronze
being a transparent welding screen for arc welding processes

supplied by the company

Cepro International B. V.
Parallelweg 38
5121 LD RIJEN
THE NETHERLANDS

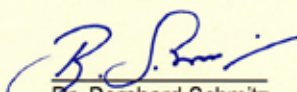
comply with the essential requirements for health and safety. The product meets the requirements for optical and physical properties, luminous transmittance, reflectance, ignition and mechanical strength as described in the relevant European and/or international standards as indicated below.

Standard / technical rules	EN ISO 25980 : 2014
Test report(s)	10451-ECS-14 2087-ECS-18 / MR 20871-ECS-18
Material and specifications	Polycarbonate Thickness: 3 mm Luminous transmittance: 7%
Marking	ISO 25980 CEPRO + month + year of manufacturing

The validity of this certificate of compliance (CoC) may be compromised if the manufacturer changes the safety related properties of the product or if the Standard referred to is modified or updated.

As a recognised and authorised testing laboratory / facility, we hereby authorise the use of our name, address and the identification number 1883 of the notified body ECS in marketing and information material produced by the manufacturer.

ECS GmbH
Notified Body 1883
16/04/18



Dr. Bernhard Schmitz
ECS-Certification



ECS GmbH – European Certification Service
Augenschutz und Persönliche Schutzausrüstung
Laserschutz und Optische Messtechnik
Hüttfeldstraße 50
73430 Aalen, Germany

CEPRO IMPACT PLATE 3 MM



Certificate of Compliance

Herewith, ECS certifies that the product(s)

**CEPRO Impact Green
being a transparent welding screen for arc welding processes**

supplied by the company

**Cepro International B. V.
Parallelweg 38
5121 LD RIJEN
THE NETHERLANDS**

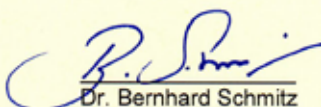
comply with the essential requirements for health and safety. The product meets the requirements for optical and physical properties, luminous transmittance, reflectance, ignition and mechanical strength as described in the relevant European and/or international standards as indicated below.

Standard / technical rules	EN ISO 25980 : 2014
Test report(s)	1076-ECS-09 part 1 2087-ECS-18 / MR 20872-ECS-18
Material and specifications	Polycarbonate Thickness: 3 mm Luminous transmittance: 0.04%
Marking	ISO 25980 CEPRO + month + year of manufacturing

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TECHNICAL DATA

Property	Unit	Value	Test Method
Physical			
Density	g/cm ³	1,23	ISO 1183
Water absorption, 50% RH, 23° C	%	0,15	ISO 62
Water absorption, saturation, 23° C	%	0,35	ISO 62
Mechanical			
Yield stress 50 mm/min	MPa	>60	ISO 527
Yield strain 50 mm/min	%	6	ISO 527
Nominal strain at break 50 mm/min	%	>100	ISO 527
Tensile modulus 1 mm/min	MPa	2300	ISO 527
Flexural strength 2 mm/min	MPa	90	ISO 178
Flexural modulus 2 mm/min	MPa	2300	ISO 178
Impact			
Charpy impact, notched 23°C, 3.0 mm	kJ/m ²	12	ISO 179/1eA
Izod impact, unnotched 23°C, 3.0 mm	kJ/m ²	NB	ISO 180/1U
Izod impact, notched 23°C, 3.0 mm	kJ/m ²	10	ISO 180/1A
Thermal			
Vicat softening temperature, rate B/120	°C	145	ISO 306
Temperature of deflection under load (type A), 1.8 MPa, flat	°C	127	ISO 75
Thermal conductivity	W/m°C	0,2	ISO 8302
Coefficient of linear thermal expansion, 23-55°C	1/°C	7x10 ⁻⁵	ISO 11359-2
Ball pressure test 125 ±2°C	-	Pass	IEC 60695-10-2
Electrical			
Volume resistivity	Ohm.cm	>10 ¹⁵	IEC 60093
Dielectric strength, in oil, 3.2 mm	kV/mm	18	IEC 60243-1
Optical			
Light transmission, 3 mm	%	89	ASTM-D1003
Fire ratings			
Rail			
Europe	-	Pass R4, Ligthing (2-4mm)	EN 45545
France	-	M2 (2-8mm)	NF P 92-501
France	-	F1 (2mm), F2 (2-8mm)	NF F 16-101
Poland	-	R1 (3 mm)	PN-K-02512
Germany	-	S4/SR2/ST2 (3-6mm)	DIN 5510-2
Italy	-	Class 1A (2 & 4mm)	UNI CEI 11170-3
Electrical			
Vertical burn (50W)	-	V0 (3-6mm)	UL94V
Limited Oxygen Index	%	34	ISO 4589-2
Glow Wire Flammability Index	°C	Pass 960°C (> 1 mm)	IEC-60695-2-12

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TECHNICAL DATA

PROCESSING

CEPRO Impact sheet is ideally suited to thermoforming. It offers high, deep draw ratios, equal wall thickness distribution, and it can be formed into complex shapes using standard thermoforming equipment. Sandwich type heating systems give the best results. CEPRO Impact sheet has a forming temperature range of 180 - 220°C. When forming, a draft angle of at least 3° should be allowed, and post mold shrinkage of 0.5 - 0.9% taken into account.

PRE-DRYING

It is important to ensure that CEPRO Impact sheets are free of moisture prior to thermoforming. A hot air circulating oven set at 120°C is recommended. 2 hours per mm thickness.

ASSEMBLING

Parts made from CEPRO Impact sheet can be assembled with plastics, metals, rubber and other materials using many types of adhesive bonding, welding and mechanical fastening techniques. Since some of these materials can cause environmental stress cracking, please consult CEPRO for advice on specific applications.

PAINTING

For either functional or decorative reasons it may be necessary to apply finish to CEPRO Impact sheets or vacuum formed parts. The product is ideally suited for use with a wide variety of modern decoration techniques. A list of approved paint systems and suppliers is available upon request.

CHEMICAL RESISTANCE

CEPRO Impact sheet has sufficient resistance to most mineral oils, greases, aliphatic hydrocarbons and acids under low or moderate stress levels. In applications where the CEPRO Impact sheet will come into contact with aggressive chemicals, specific (application related) testing is always advised. Effective painting systems can improve chemical resistance.