Barad Atlanta Trading LLC
Sharjah UAE
www.albaraduae.com

extruflex
flexible vinyl extrusion world leader

Technical Data

PROPERTY	Standard	Units	Standard	Description
Light transmittance	ASTM D 1003	%	≤ 13	Visible light rate transmitted through the material.
Shore A hardness	EN ISO 868	Sh A	80	Index based on a flat indenter's penetration depth. Scale from 0 (Soft) to 100 (Hard).
Tearing resistance	DIN 53515	N/mm	55	Minimum tensile stress required to tear a pre-slit sample.
Tensile strength at break	ASTM D 638 EN ISO 527	N/mm^2	18	Maximum tensile stress that a material can be subjected to before break.
Elongation at break		%	300	Elongation of the specimen at the break point under tensile stress.
Residual elong. (after break)		%	62	Permanent elongation of the specimen measured after rupture in a tensile test.
Thermal conductivity	ASTM C 177	W/m.K	0,16	Ability to conduct heat. The Lower it is, the more insulation.
Cold bend brittle temp.	ISO 8570	°C	-25	Temperature at which the specimen break under torsion stress. Brittle point (CLASH & BERG).
Min. usage temp.	EN 1876	°C	-15	Temperature range where material keep its mechanical properties (flexibility).
Max. usage temp.		°C	+50	
Vicat softening temp.	EN ISO 306	°C	50	Temperature at which the specimen is penetrated to a depth of 1 mm by a 1 kg flat indenter of 1 sq. mm.
Specific heat capacity	ISO 11357	kJ/kg.K	1,6	Heat energy required to increase the temperature of one kilogram of the material by one degree Celsius.
Sound reduction	DIN 52210	dB	>35	Average sound level (freq. 0,1 to 3,2 kHz) decreased by a 1,76 sq.m. and 5 mm thick PVC curtain.
Reaction to fire	EN 1598	-	Yes	Standard classifications of material self-extinguishing and resistance to combustion.
UV/IR filter	EN 1598 & ISO 25980	-	Yes	Ability to filter welding rays allowing the use of this material as a welding protection screen.
UV resistance	ISO4892	-	Yes	Ability to resist to UV (Sun, welding arc).
Surface resistivity	ASTM D257	$.10^{10}$ Ω/□	30	Material surface electric resistivity measured with a 100 V direct voltage.
Water absorption	EN ISO 62	%	-0,2	Material mass variation after exposure to humid conditions. (<0 if released / >0 if absorbed)
Anti-insect	-	-	No	Special ability to keep insects away.(Food processing plants, tropical regions)
Density	ASTM D 792	g/cm^3	1,25 to 1,30	Mass per unit volume.

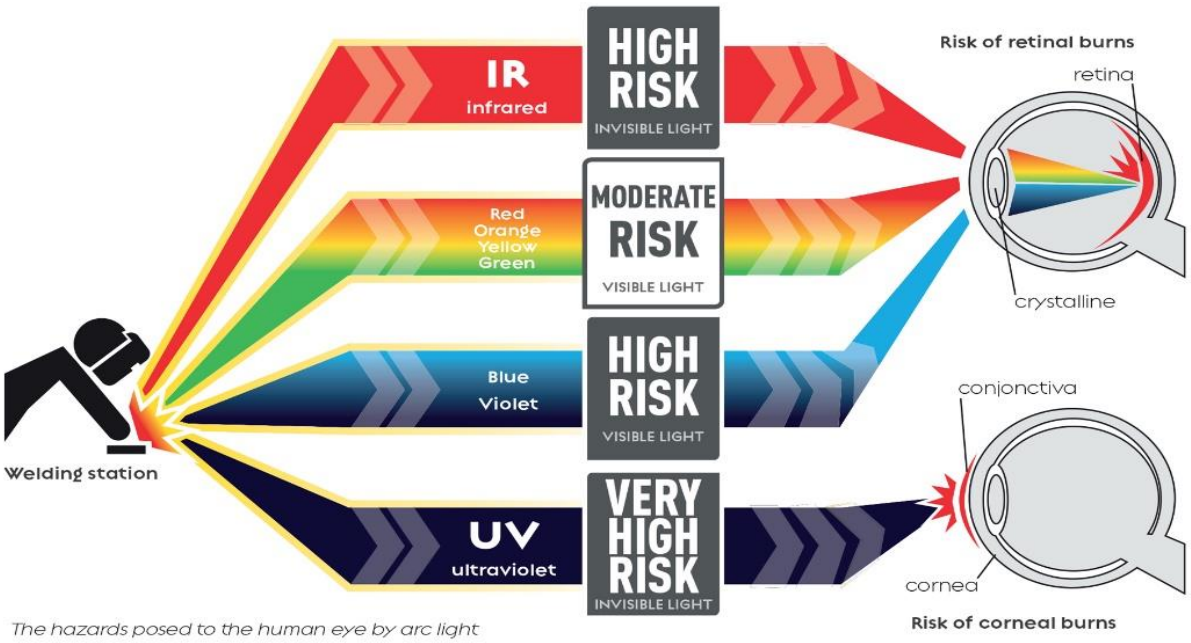
THE INTERNATIONAL SAFETY STANDARD

Published in 2014, ISO Standard 25980 is the result of international commitment to providing a definitive set of guidelines with regard to health and safety in the arc welding sector. The ISO Standard 25980 combines the EN1598 and AWSF2.3M:2011.

/// AN EFFECTIVE SCREEN AGAINST RADIATION

Electric arc welding produces a very bright light consisting, in part, of ultraviolet and infrared radiation, together with a blue light which can cause serious and irreversible lesions of the eye.

The **ScreenFlex®** protective screen absorbs hazardous radiation, regardless of whether it is visible, such as blue light, or invisible, such as infrared and ultraviolet radiation.



The hazards posed to the human eye by arc light

/// THE OPTICAL REQUIREMENTS OF ISO 25980

- Reduction of excessive exposure to visible and infrared light (risk factor G <1).
- Suppression of at least 99.998% of UVB and UVC radiation.
- Less than 10% of the light reflected toward the welder.
- Less than 20% increase in transmittance during accelerated ageing tests.

Limit of incandescence:
3 seconds after the flame is withdrawn

/// A FIREPROOF BARRIER AGAINST WELD SPATTER

The scattering of molten metallic particles (weld spatter) can attain temperatures in excess of 1,500 °C and this constitutes a real danger of burns or the outbreak of fire.

The **ScreenFlex®** protective screen prevents the spread of weld spatter and safeguards the working environment of the welder.

THE SCREENFLEX® PRODUCT RANGE

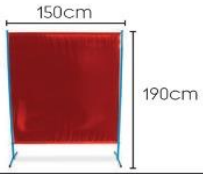
The ScreenFlex® product range satisfies all the criteria defined by these industrial standards: ISO 25980 (International), EN1598 (Europe) and AWSF2.3M:2011 (USA).

4 COLOURS AVAILABLE →	 red	 Light green	 Matt green	 Bronze
Transparency (supervision and safety)	****	**	*	***
Comfort for the outside observer	*	***	****	**
Protection from radiation	****	****	****	****

ScreenFlex® *screens are available in 4 colours for improved supervision and the protection of personnel outside the workstation.*

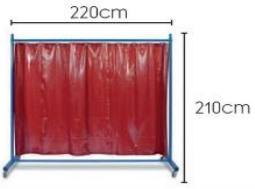
ROLLS	
STANDARD DIMENSIONS*	200mm × 2mm × 50m
	300mm × 2mm × 50m
	570mm × 1mm × 50m
	1400mm × 0,4mm × 50m

PRE-DRILLED STRIPS AND HOOKS	
STANDARD DIMENSIONS*	300mm × 2mm × 1600mm
	300mm × 2mm × 1800mm
	570mm × 1mm × 1600mm
	570mm × 1mm × 1800mm

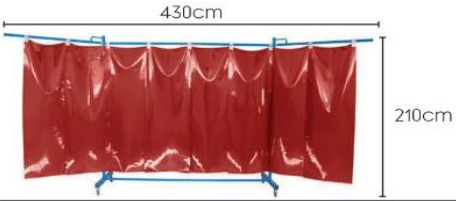


ECO KIT	
STANDARD DIMENSIONS*	1400mm × 0,4mm × 1500mm

WELDING CURTAINS AND HOOKS	
STANDARD DIMENSIONS*	1400mm × 0,4mm × 1400mm
	1400mm × 0,4mm × 1600mm
	1400mm × 0,4mm × 1800mm



PRO KIT	
STRIP VERSION (standard dimensions)	300mm × 2mm × 1600mm
	300mm × 2mm × 1800mm
	570mm × 1mm × 1600mm
	570mm × 1mm × 1800mm
CURTAIN VERSION (standard dimensions)	1400mm × 0,4mm × 1600mm
	1400mm × 0,4mm × 1800mm

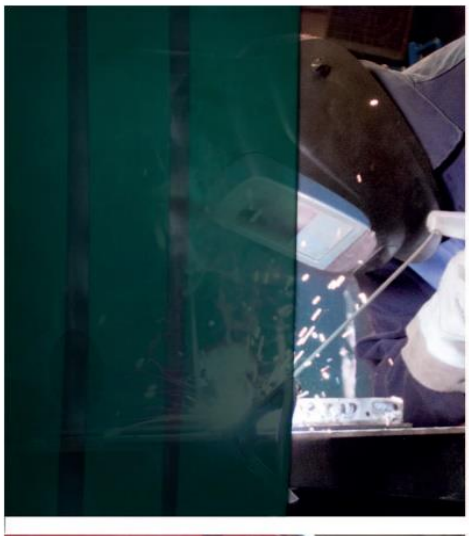


TRIPTYCH KITMV	
STRIP VERSION (standard dimensions)	300mm × 2mm × 1600mm
	300mm × 2mm × 1800mm
	570mm × 1mm × 1600mm
	570mm × 1mm × 1800mm
CURTAIN VERSION (standard dimensions)	1400mm × 0,4mm × 1600mm
	1400mm × 0,4mm × 1800mm

*Please contact us for details of other dimensions.

APPLICATIONS

Industry, assembly line, workshop










Barad Atlanta Trading LLC, Sharjah UAE

WELDING IN COMPLETE SAFETY

Arc welding generates a high concentration of energy, together with physical hazards for the working environment of the welder.

/ **Hazards caused by light radiation**
An electric arc emits significant amounts of ultraviolet, infrared and blue light radiation which can cause cicatrising conjunctivitis, erythema and other types of ocular lesion.

/ The **risk of fire** and the risk of **burns caused by weld spatter**:
The welding arc generates weld spatter at temperatures which can exceed 1,500 °C.

THE SOLUTION : THE SCREENFLEX® FIREPROOF FILTERING SCREEN

The ScreenFlex® screen provides protection for the working environment of the welder:

/ It filters hazardous radiation from blue light, ultraviolet light and infrared light.
/ It eliminates any hazard caused by weld spatter, as well as any risk of fire outside the working area.

Protection of property

Protection from personal injury

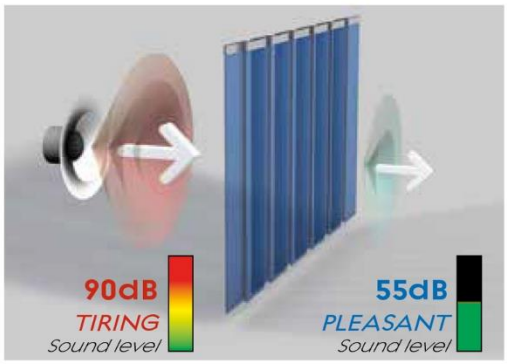
FLEXIBLE VINYL INSULATES YOUR BUILDING

Flexible and transparent, soft vinyl is an excellent thermal and phonic insulator. Such qualities, which are rarely combined in materials like glass, wood, metal and other thermoplastics, make flexible vinyl a choice material.

/// A BARRIER TO REDUCE NOISE PROPAGATION

The material behaves like a soft viscoelastic mass that can absorb sound waves and dissipate its energy in the form of micro-heat by a viscous amortisation phenomenon. This property lets flexible vinyl absorb all sound waves -in particular low frequencies- better than other materials.

- An average reduction of -35 dB equivalent to wearing mufflers
- 1 to 5 mm of thickness is enough to get -35 dB



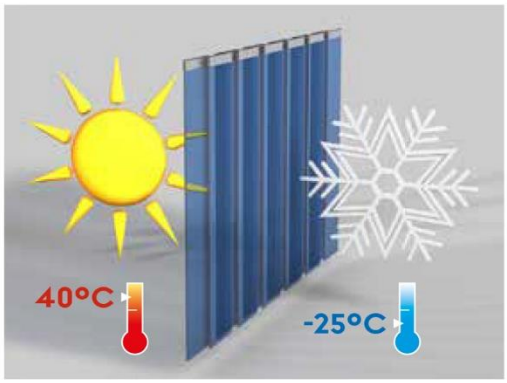
/// THE BEST SOLUTION FOR THERMAL INSULATION

Flexible vinyl is an advantage in your building.

Insulation and energy gain are greater than with all plastics (except polystyrene).

- Excellent thermal conductivity (λ) and resistance (R) (similar to characteristics of wood):
  $\lambda = 0{,}16\ W.m^{-1}.°C^{-1}$
  $R = 30\ m^2.°C.W$ (5mm d'épaisseur)

- Simple installation: thin, flexible material easy to install
- Transparency for a secure installation and creation of insulating partitions



GUILLAUME TEISSEDRE – ENGINEER AND HEAD OF THE R&D SERVICE, GIVES US HIS EXPERT APPRAISAL:

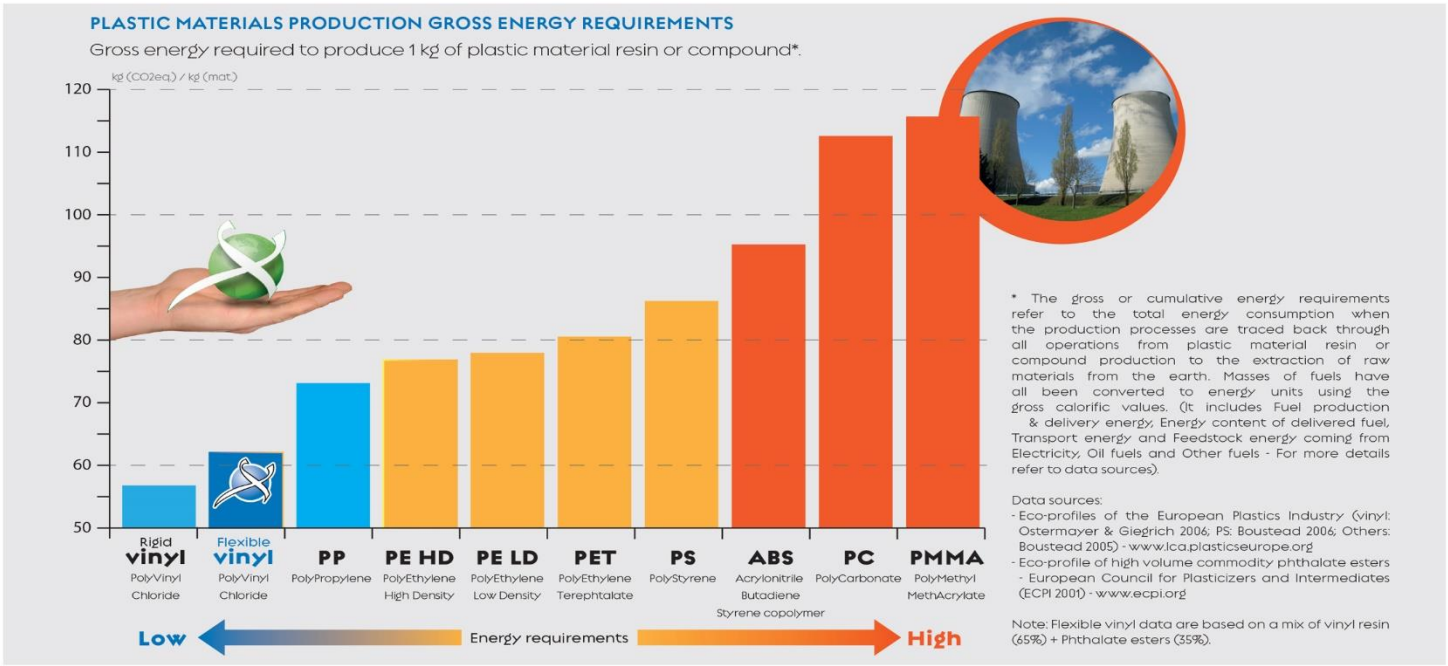
"FLEXIBLE VINYL IS ONE OF THE RARE PLASTIC MATERIALS THAT CAN BE FORMULATED TO CONFER THE DESIRED PROPERTIES TO IT. BOTH EXTRUDER AND COMPOUNDER, THE EXTRUFLEX TECHNICAL TEAM TRIES TO MEET AND OFFER THE BEST SOLUTIONS TO OUR CUSTOMERS' SPECIFICATIONS."

FOCUS ON

PLASTIC MATERIALS & EARTH'S ENERGY RESOURCES

Like any products, plastic materials have impacts on earth's energy resources. To assess those impacts, plastics eco-profile studies use the gross energy required to produce them. It includes all gross primary fuels used as energy or raw materials and all other energy resources consumed all along the production process (from earth's resources extraction to plastics resins or compounds production).
Plastic materials have very different gross energy requirements, leading to very different impacts on earth's resources. Making the right material choice has become essential in a context where earth's energy resources need to be carefully controlled.

/ **Extruflex** help to make the right material choice to save and preserve earth's natural resources.



Plastics which use high levels of energy are often used in order to make more profits to the detriment of environment and earth's resources. Such practices have contribute to degrade the image of plastics in the public opinion instead that low production energy requirements plastics such as flexible PVC are earth's resources respectful and environmental friendly.
Due to its very low production energy requirements and its highly efficient applications, such as strong thermal insulation,

/ **Extruflex** flexible vinyl strips & sheets save and preserve earth's natural resources and environment.

ENVIRONMENT & SAFETY

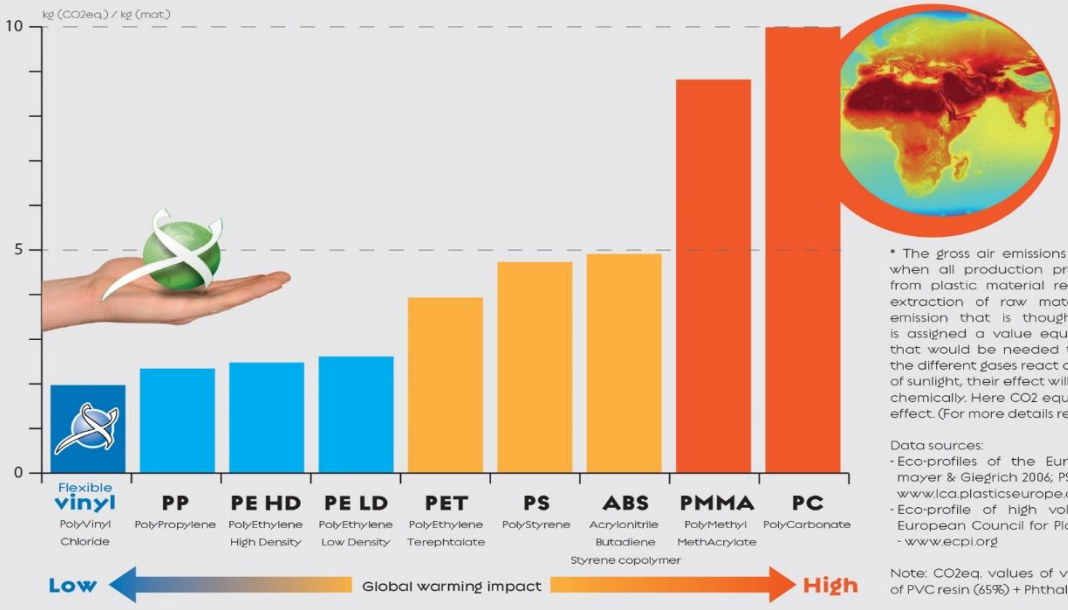
PLASTIC MATERIALS & GLOBAL WARMING

Like any products, plastic materials have impacts on earth's global warming and environment. To assess those impacts, plastics eco-profile studies use the carbon dioxide equivalents or global warming potential of the gases emitted all along the production process (from earth's resources extraction to plastics resins or compounds production).
Gas emissions can be very different according to the plastic material produced, leading to very different impacts on earth's global warming and environment. Make the right material choice has become essential in a context where earth is warming faster and faster to levels never met before and needs to be saved and preserved urgently.

/ **Extruflex** help to make the right material choice to save and preserve earth.

PLASTIC MATERIALS PRODUCTION GLOBAL WARMING IMPACT

Carbon dioxide equivalents (20 year equiv) corresponding to the gross air emissions for the production of 1 kg of material resin or compound *



* The gross air emissions refer to the cumulative totals arising when all production processes operations are traced back from plastic material resin or compound production to the extraction of raw materials from the earth. Any gaseous emission that is thought to contribute to global warming is assigned a value equal to the equivalent amount of CO2 that would be needed to produce the same effect. Because the different gases react chemically in the atmosphere as a result of sunlight, their effect will change with time as they are changed chemically. Here CO2 equivalent values correspond to a 20 year effect. (For more details refer to data sources).

Data sources:
- Eco-profiles of the European Plastics Industry (vinyl: Ostermayer & Giegrich 2006; PS: Boustead 2006; Others: Boustead 2005) www.lca.plasticseurope.org
- Eco-profile of high volume commodity phthalate esters - European Council for Plasticizers and Intermediates (ECPI 2001) - www.ecpi.org

Note: CO2eq. values of vinyl and flexible vinyl based on a mix of PVC resin (65%) + Phthalate esters (35%) are similar within 2%.

High global warming impact plastics are often used in order to make more profits to the detriment of environment. Such practices have contributed to degrade the image of plastics in the public opinion instead that low global warming impact plastics such as flexible PVC are safe and environmental friendly.
Due to its very low global warming potential air emissions and its highly efficient applications, such as strong thermal insulation,

/ **Extruflex** flexible vinyl strips & sheets save and preserve earth's natural resources and environment.

FOCUS ON

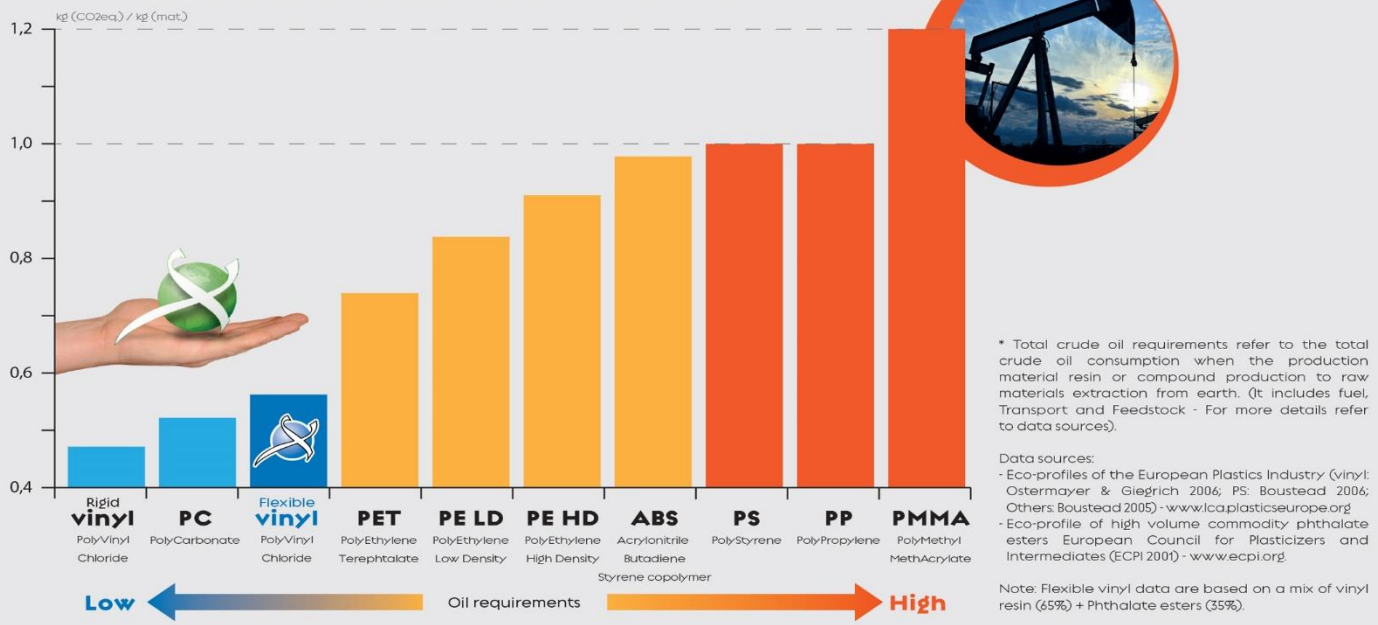
PLASTIC MATERIALS & OIL RESSOURCES

Most plastic materials are derived from oil. Oil offers an extraordinary range of possibilities as to its use. This precious resource has been abusively exploited for many years, making earth's reserves run low. Nowadays it is essential to save and preserve this resource by using it respectfully at its fair value.
43% of vinyl resin is made from petroleum products and 57% from salt products. Salt is for over half of its weight, a resource available in abundance on earth (sea water), flexible vinyl is among the plastic materials consuming less oil resources. Flexible vinyl contributes to save and preserve earth's oil resources by using it efficiently and respectfully.

/ **Extruflex** help to make the right material choice to save and preserve earth's natural resources.

PLASTIC MATERIALS PRODUCTION OIL CONSUMPTION

Gross energy required to produce 1 kg of plastic material resin or compound *.



* Total crude oil requirements refer to the total crude oil consumption when the production material resin or compound production to raw materials extraction from earth. (It includes fuel, Transport and Feedstock - For more details refer to data sources).

Data sources:
- Eco-profiles of the European Plastics Industry (vinyl: Ostermayer & Giegrich 2006; PS: Boustead 2006; Others: Boustead 2005) - www.lca.plasticseurope.org
- Eco-profile of high volume commodity phthalate esters European Council for Plasticizers and Intermediates (ECPI 2001) - www.ecpi.org.

Note: Flexible vinyl data are based on a mix of vinyl resin (65%) + Phthalate esters (35%).

Oil greedy plastics are often used in order to make more profits to the detriment of environment and earth natural resources. Such practices have contribute to degrade the image of plastics in the public opinion instead that low oil requirements plastics such as flexible vinyl are earth natural resources respectful and environmental friendly.
By efficiently using low oil quantity for highly efficient application such as thermal insulation, **Extruflex** flexible vinyl strips & sheets contribute to save and preserve earth natural resources.

/ **Extruflex** flexible vinyl strips & sheets save and preserve earth's natural resources and environment.

ENVIRONMENT & SAFETY

extruflex

Racing ahead for safety and environment

Levallois-Perret, 17 September 2008,

To whom it may concern

CERTIFICATE

HYGIENE OF FOODSTUFFS

All **extruflex** flexible PVC strips and sheets (except anti-static references (Ref. 180) which is moisture absorbent as mentioned on its label) can be used as floor surface, wall surface, ceiling or door in rooms where food is prepared, treated or processed, including rooms contained in means of transport.

This smooth surface, non-absorbent, impervious, washable and non-toxic material is easy to clean and to disinfect. It meets the requirements enounced by the regulation (CE) n° 852/2004 of the European parliament and of the council of 29 April 2004 in reserve to be correctly implemented.

Thank you for your concern and support to our environmental and safety policy.

Jacques VALAT
Chief Executive Officer

extruflex

Racing ahead for safety and environment

Levallois-Perret, 17 September 2008,

To whom it may concern

CERTIFICATE

SILICONE FREE PRODUCTS

extruflex flexible PVC strip and sheet products do not contain silicone.

This does not mean that this substance may not be found in our products in extremely low quantities, without toxicological or regulatory significance.

extruflex can in no way be held responsible if the product is contaminated by other products it may come in to contact with after the goods are dispatched.

Thank you for your concern and support to our environmental and safety policy.

Jacques VALAT
Chief Executive Officer

extruflex

Racing ahead for safety and environment

extruflex FLEXIBLE PVC TECHNICAL SPECIFICATIONS

- DESCRIPTIONS -

PROPERTY	Standard	Description
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Reaction to fire	NF P 92-507 AS/NZS 3837 DIN 4102	Standard classifications of material self-extinguishing and resistance to combustion.
UV/IR filter	EN 1598	Ability to filter welding rays allowing the use of this material as a welding protection screen.
UV resistance	ISO4892	Ability to resist to UV (Sun, welding arc).
Charge buildup	IEC 61087	Earthed sample is rubbed with cotton, acrylic and nylon rubbers. At electrode approach, spark appears or doesn't.
Surface resistivity	IEC 60093	Material surface electric resistivity measured with a 500 V direct voltage.
Water absorption	EN ISO 62	Material mass variation after exposure to humid conditions. (<0 if released / >0 if absorbed)
Anti-insect	-	Special ability to keep insects away.(Food processing plants, tropical regions)
Density	ASTM D 792	Mass per unit volume.

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