
SAITEC
A NEW TAKE
ON CHEMISTRY

PRESENTATION

Since 1970, SAITEC has been dedicated to the development and manufacturing of rigid polyurethane systems tailored to its customers' needs.

Rigid polyurethane, polyisocyanurate and phenolic foams are used in a wide variety of fields for their outstanding lightness, insulation quality, physical strength, chemical / fire / mechanical resistance, as well as their endurance.

All products are the result of advanced research to meet the requirements of the following markets :

>>> Automotive
>>> Construction
>>> Boating
>>> Aerospace
>>> Oil & Gas
>>> Miltary
>>> Machining / Tooling & Forming
>>> Medical
>>> Packaging
>>> Acoustics

SAITEC has a strong sustainable development policy and is committed to lowering its impact on the environment to help preserve natural resources.

This dedication is best shown by its research in the recycling and repurposing of waste foams.

SUMMARY

EXPERTISE

PU/Composite Systems - Formulation

For over 40 years, SAITEC has been developing polyurethane and composite systems in close collaboration with its customers for a large range of applications:
:
>>> Rigid foams for insulation and structural filling
>>> Semi-rigid foams and integral skin foams for comfort applications (furniture…)
>>> Compact rigid RIM casting resins
>>> Syntactic foams for high pressure deepsea environments
>>> Bi-component polyurethane glues
>>> Self-levelling floors technical resins

The width of its offer reflects the extent of SAITEC's expertise. All foams produced are the result of its laboratory's careful formulations.

Rigid foam manufacturing

With one of Europe's highest foam casting capacities (250 m3/hour), SAITEC continuously produces polyurethane, polyisocyanurate and phenolic foam blocks in perfect compliance with all health, safety and environmental regulations.

Cutting and machining

SAITEC's cutting machinery can produce both standard and customized slabs (with rabbets, grooves, grids, holes, etc.).
It can cut along two or three axes simultaneously and thus create profiles, shells and other shaped pieces. The entire production line meets the highest and most rigorous standards.

The SAITEC sales and technical teams are very attentive to their customers' needs and are always available to advise them on the selection and implementation of products.
Because each project is unique, SAITEC rigorously takes all necessary steps to ensure that the customer's requirements are met.

SPECIAL FEATURES

Project support – In-Site foaming

SAITEC possesses a great level of expertise regarding both the formulation and the implementation of its foams. This allows it to support its customers through the provision of formulas, adapted transformation machinery as well as human resources to ensure proper training of the customer's teams or to oversee projects of all kinds.

Certifications

SAITEC has been operating under an ISO 9001 certified quality management system since 1991. Its production is subject to regular audits by third party organizations to meet the market's requirements.

THE RANGE

The chemistry of polyurethane is very rich. It allows for the development of a large variety of end products characterized by their density, hardness, resistance to fire and flex, etc.
Formulations vary in reactivity (creaming, threading and expansion time), enabling their adaptation to numerous transformation processes and implementation methods.

APPLICATIONS

SAITIN – Injection range
Bi-component system for insulation, molding of expanded and compact pieces, cavity filling, stabilization of floors, floating, etc.

SAIBAT – Spray range
Bi-component system for partitions, walls, roofs and terraces.

DIPGLUE – Range of bi-component glues

DIPSOL – Range of floor coverings

DIPCOAT – Range of anti-corrosion products for industrial applications

DIPOXY – Range of syntactic epoxy products certified by specialized organizations for subsea applications

TECHNICAL DATAS

Standard Polyurethane systems

Reference	Density (g/l)	A/B Ratio (weight)	Creaming time at 20°C (s))	Thread time at 20°C (s)	Expansion time at 20°C (s)	Fire resistance
SAITIN 083KS	36	100/112	55	230	300	M4
SAITIN 059KS	40	100/100	30	70	100	M1
SAITIN 404E2	40	100/114	35	140	180	M4
DIPGLUE 302	1300	100/25	1800	310 +/- 30	48 h	M4

A formulation contains two products: a polyol (product A) and an isocyanate (product B). It is therefore called « bi-component ». Every system is characterized by the A/B ratio. This ratio can be expressed in terms of volume or weight. Respecting the A/B ratio is the key to a successful implementation and the insurance of a satisfactory end result.

Packagings available

Available in 1 liter tubs to 220 liter drums or 1000 liter containers.

THE RANGE

Low density SAITPUR polyurethane foams are available in densities ranging from 35 to 60 kg/m³. They were specifically developed to meet the requirements of the thermal insulation market.

Their very low heat insulation coefficient (lambda λ = 0,021 W/m.°C) makes them an excellent choice for refrigeration applications.

Their high resistance to styrene is a great asset for their use as a core material for composite applications.

APPLICATIONS

Low density SAITPUR foams are used as a thermal insulant for the manufacture of composite panels and pieces used in the conception of crates for isothermal trucks and cold rooms.

SAITPUR foams are very light. They are therefore suited for any type of machining for the creation of cores cavities in moldings, molds for orthopedics, material for sculpture, specific packaging shapes, etc.

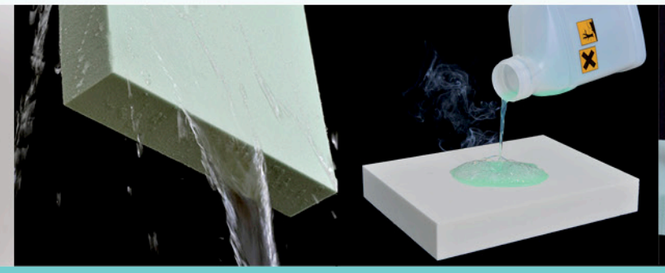
SAITPUR foams are CE-certified, proof of their performance as an insulation material for building applications.

DIMENSIONS

Available standard dimensions

Reference	Length x Width (mm)	Height (mm)
SP035	2000 x 1000 or 2500 x 1200 / 1250	800
SP037	2500 x 1200 / 1250	750
SP040	2500 x 1200 / 1250	750
SP042	2500 x 1200 / 1250	700
SP050	2500 x 1200 / 1250	500
SP060	2500 x 1200	480

SAITPUR foams can be transformed into panels, profiles or other shaped items.
Other dimensions and specific cuts are available upon request.



TECHNICAL DATAS

Reference	Density (Kg m³)	Compressive strength (KPa)	Closed cells ratio	Flexural strength (KPa)	Shear strength (KPa)	Operating temperature (°C)
SP035	35	190	> 95%	400	160	-40 / +100
SP037	37	210	> 95%	450	180	-40 / +100
SP040	40	260	> 95%	550	200	-40 / +100
SP042	42	290	> 95%	550	220	-40 / +100
SP050	50	370	> 95%	800	260	-40 / +100
SP060	60	500	> 95%	1000	300	-40 / +100

SPECIAL REQUESTS

Special features are available upon request for this range: soft look for adhesive applications, high mechanical performance, no specific characteristic for economical foams, etc.

THE RANGE

SAITPUR medium density polyurethane foams range from 80 to 200kg/m³.
They were developed to meet the requirements of the building and composites markets.

These foams are an excellent core and structural material due to their outstanding mechanical properties, especially with regards to compression.

They are also well suited for polyester lamination thanks to their high chemical resistance against most solvents and hydrocarbons.

APPLICATIONS

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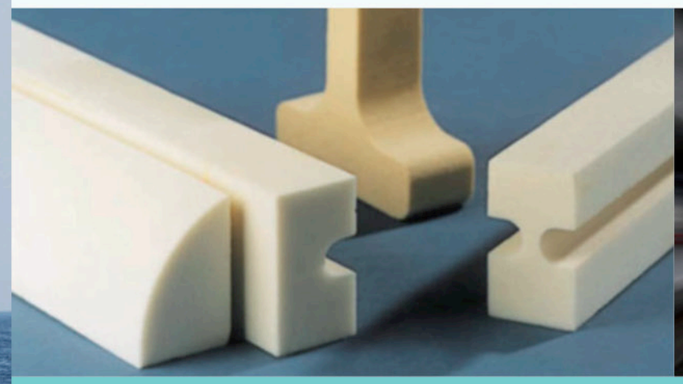
They are also well suited for polyester lamination thanks to their high chemical resistance against most solvents and hydrocarbons.

DIMENSIONS

Available standard dimensions

Reference	Length x Width (mm)	Height (mm)
SPF080	2500 x 1200	400
SPF100	2500 x 1200 / 1250	350
SPF120	2500 x 1200 / 1250	350
SPF150	2500 x 1200 / 1250	300

SAITPUR foams can be transformed into panels, profiles or other shaped items.
Other dimensions and specific cuts are also available upon request.



TECHNICAL DATAS

Reference	Density (Kg m³)	Compressive strength (KPa)	Young's modulus (N/mm²)	Flexural strength (KPa)	Tensile strength (KPa)	Operating temperature (°C)
SPF080	80	800	19	1150	700	-120/+120
SPF100	100	1100	30	1300	850	-120/+120
SPF120	120	1200	30	1500	1000	-120/+120
SPF150	150	1600	38	2000	1150	-120/+120

SPECIAL REQUESTS

Special features are available for this range upon request: soft look for paint applications, higher density for insulating pipe supports (200, 240 and 320 kg/m³), various profiles, etc.

THE RANGE

PIRUNTEC polyisocyanurate foams were developed to meet the requirements of the industrial insulation market.

Their very low heat insulation coefficient (lambda λ = 0,021 W/m.°C) makes them an excellent choice for thermal insulation and cryogenics applications.

They are fire resistant and have a closed cell ratio of over 95%.

APPLICATIONS

PIRUNTEC foams can cover temperatures ranging from -200°C to +200°C.
They are used in the manufacture of insulating elements as well as composite fire resistant insulating panels.

They can be found as end products for industrial insulation, AC engineering, construction and as insulation panels.
PIRUNTEC foams are CE-certified, proof of their performance as an insulation material for building and industrial applications.

DIMENSIONS

Available standard dimensions,

Reference	Length x Width (mm)	Height (mm)
PIR035	2500 x 1000 /1200	800/600
PIR037	2500 x 1200	600
PIR040	2000 x 1000 2500 x 1000 / 1200	800 600
PIR042	2500 x 1000 / 1200	600
PIR050	2500 x 1000 / 1200	600
PIR080	2500 x 1000	500
PIR100E	2500 x 1000	350

PIRUNTEC foams can be transformed into panels, profiles, shaped items such as shells, staves, bent tubes, tee pieces, reduction pieces, valve boxes, supports, etc.
Other dimensions and specific cuts are also available upon request.

TECHNICAL DATAS

Reference	Density (Kg m³)	Compressive strength (KPa)	Tensile strength (KPa)	Water – Vapor permeation (g/m²/24h)	Fire resistance	Smoke resistance	Operating temperature (°C)
PIR035	35	200	280	40-80	Cs3d0	F2	-120/+120
PIR037	37	220	300	40-80	Cs3d0	F2	-120/+120
PIR040	40	230	340	40-80	M1	NM	-200/+120
PIR042	42	260	350	40-80	M1	NM	-200/+120
PIR050	50	350	400	40-80	M1	F3	-200/+120
PIR080	80	700	550	40-80	M1	F3	-120/+120
PIR100E	100	1200	600	40-80	M1	F3	-120/+120

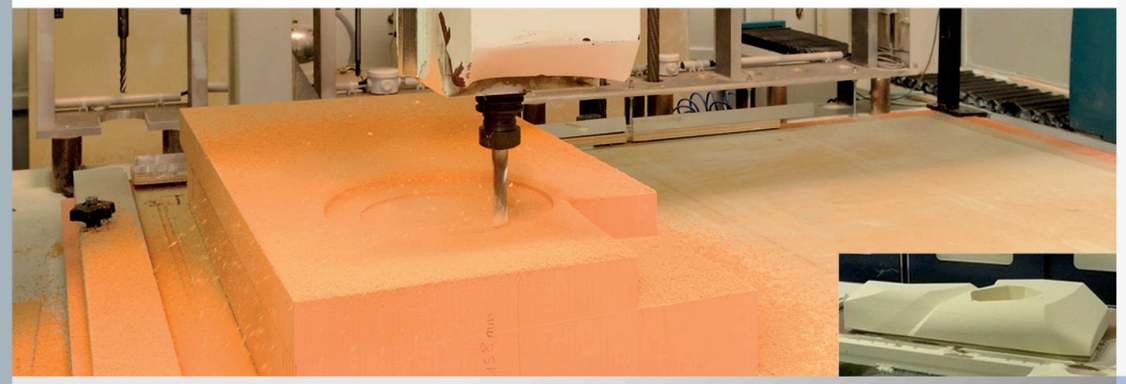
NM : Not measured

SPECIAL REQUESTS

Special features are available upon request for this range: high temperature resistance, higher densities (60,150 Kg/m³) for structural applications, etc.

THE RANGE

SBF, MHD and DIPLAC Machinable slabs were developed to meet the requirements of the modeling market as well as that of manual or CNC machining.

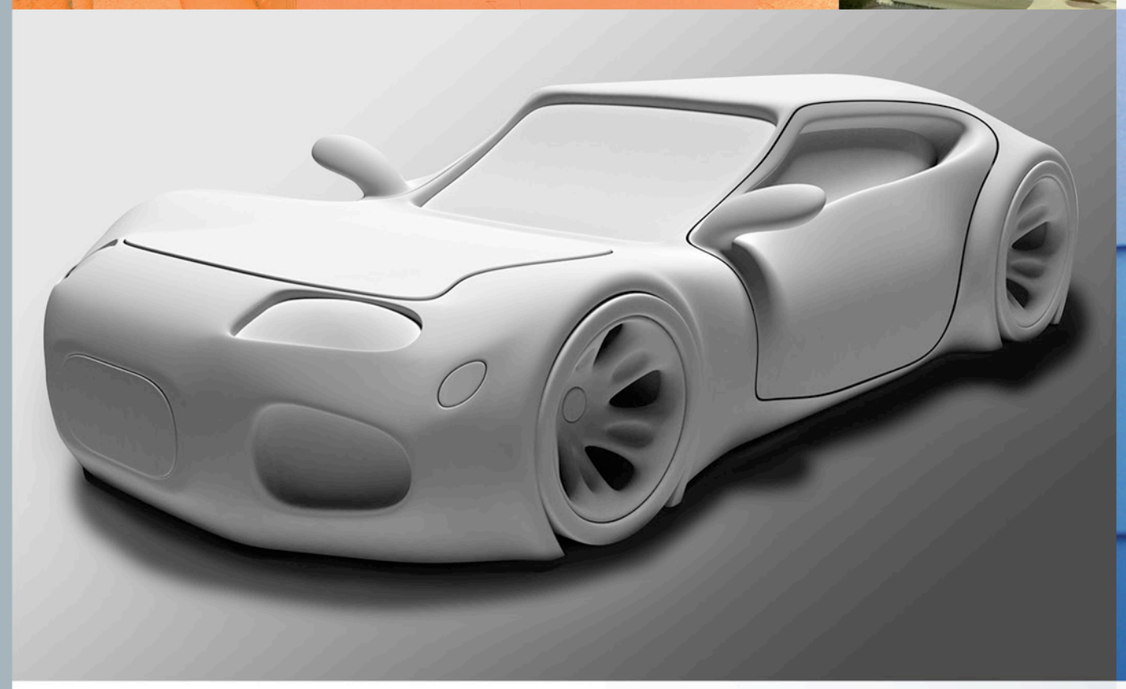


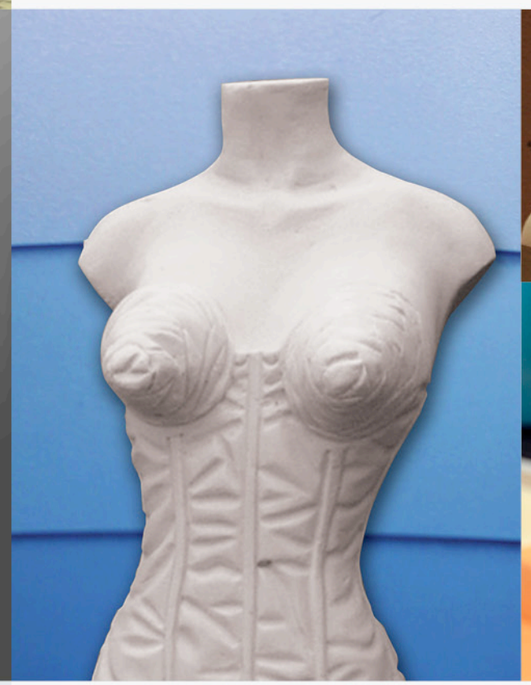
Available standard dimensions

Reference	Density (Kg/m³)	Length x Width (mm)	Thickness (mm)	Hardness (Shore)
SBF100	100	2500 x 1200	350	30 shore (A)
MHD150	150	2000 x 1000	100 / 150 / 200	9 shore (D)
MHD250	250	2000 x 1000	100 / 150 / 200	18 shore (D)
MHD350	350	2000 x 1000	100 / 150 / 200	25 shore (D)
DIPLAC500	500	2000 x 900 1000 x 750	50 150	35 shore (D)

SBF, MHD and DIPLAC foams can be transformed into panels, profiles, shaped items such as shells, staves, bent tubes, tee pieces, reduction pieces, valve boxes, supports, etc.

Other dimensions and specific cuts are also available upon request.





APPLICATIONS

SBF, MHD and DIPLAC foams are used for the creation of styling models, prototypes, tools and other decorative elements.

They can be treated and painted for a high quality finish look.

They can also be used as reinforcement or inserts in sandwich panels.

SPECIAL REQUESTS

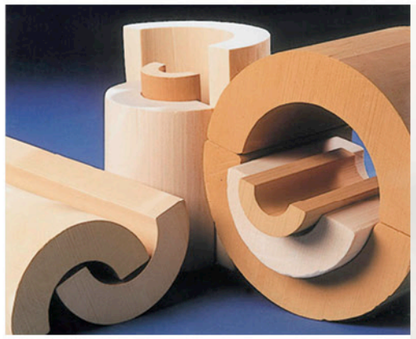
Special features are available upon request for this range: other densities (80, 450 Kg/m³ or other).

THE RANGE

PHENEXPAN phenolic foams were developed to meet the requirements of the insulation and construction markets. Their density is comprised between 40 Kg/m³ and 150 Kg/m³.
They are famous for their fire resistance and flame-retardant qualities which are largely superior to those of any other cellular material as well as the very low amount of smoke they emit in case of fire.
PHENEXPAN foams are Bs1d0 certified (Euroclass).

APPLICATIONS

PHENEXPAN foams are resistant to mold and bacteria. They are therefore an ideal material for refrigerated water pipes.
They are mostly used in the fields of industrial insulation, climate engineering, cold insulation, the public sector or public access buildings (hospitals, hotels, etc.).
They have a great capacity for shock absorption and are thus also used for the packaging of fragile items.



DIMENSIONS

Available standard dimensions

Reference	Length x Width (mm)	Thickness (mm)
PHX040	2500 x 1000	800
PHX060	2500 x 1000	600
PHX080	2000 x 1000	500
PHX100	2000 x 1000	350
PHX120	2000 x 1000	300
PHX150	2000 x 1000	250

PHENEXPAN foams can be transformed into panels, profiles, shaped items such as shells, staves, bent tubes, tee pieces, reduction pieces, valve boxes, supports, etc. Other dimensions and specific cuts are also available upon request.

TECHNICAL DATA

Reference	Density (Kg m³)	Compressive strength (KPa)	Thermal conductivity (W/m)	Classement Feu	Smoke class
PHX040	40 +/-3	220±50	0.03	M1, Bs1d0	F1
PHX060	60 +/-4	400±80	0.04	M1	F1
PHX080	80 +/-6	600±150	0.04	M1	F1
PHX100	100 +/-7	900±150	0.04	M1	F1
PHX120	120 +/-10	1300±200	0.04	M1	F1
PHX150	150 +/-15	1550±250	0.05	M1	F1

SPECIAL REQUESTS

Special features are available upon request for this range : higher densities (180, 250 Kg/m³ or other).

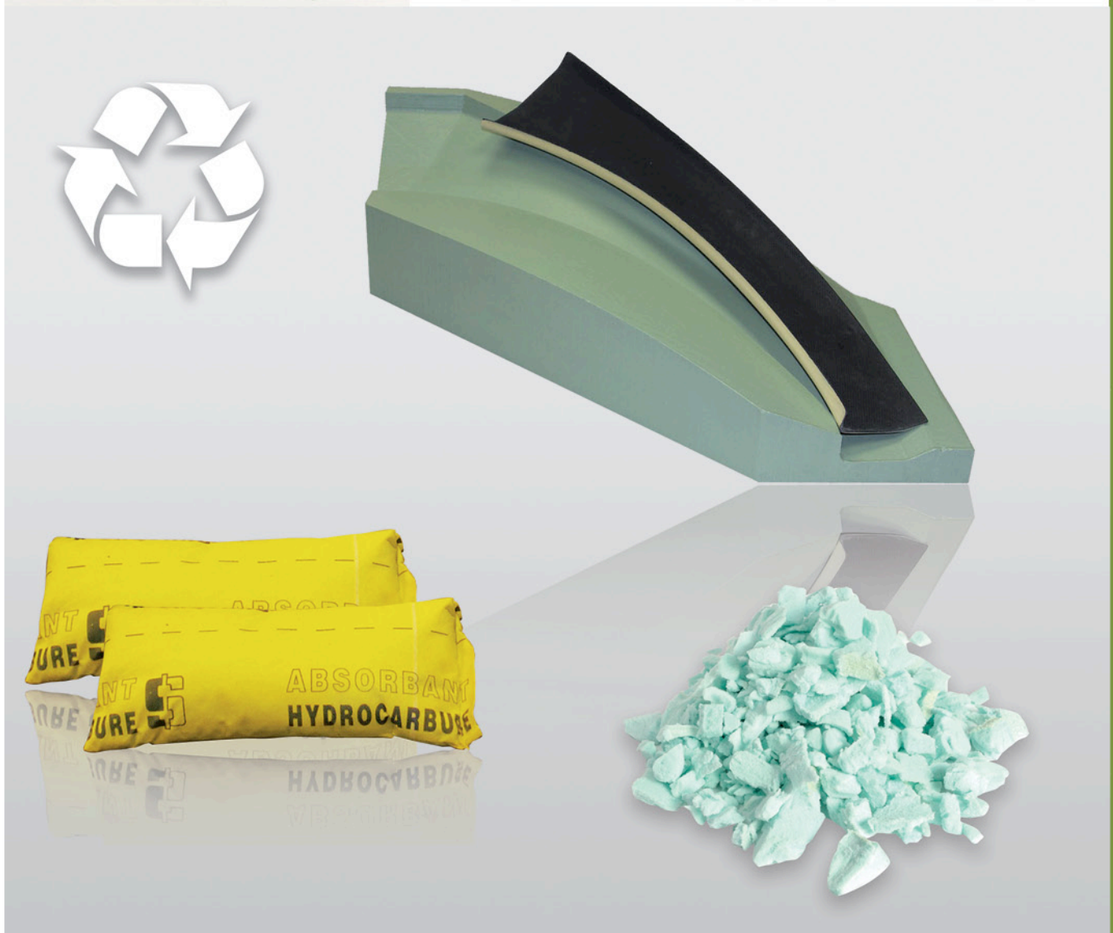
THE RANGE

As part of its environmental policy, SAITEC takes constant care to recover technical offcuts as well as the powders created during the transformation process.

DIPLAC500 is created through the agglomeration of these wastes with a specific binding agent. It is greatly machinable and can therefore be used as a core material for work surfaces, sink bowls, shower trays, door and window framings, etc.

DIPSORB powders are approved by the CEDRE (French documentation, research and experiment center for accidentally polluted waters). They have oleophilic properties and are used in the absorption of oils and hydrocarbons. They come in packs, cushions or mattresses to facilitate their use.

They can also be used as a lightening material in cements and mortars or in potting soils to lighten the substrates for green walls and roofs.



SAITEC

Z.I. - 5 Bd Pascal - BP 339
85303 CHALLANS CEDEX

Tél. +33 (0)2 51 49 64 00

Fax +33 (0)2 51 49 64 09

www.saitec.fr
info@saitec.fr

Graphisme : ao communication (06 60 19 01 59)

SAITEC S.A.S. - R.C.S. La Roche sur Yon : 487 080 442 B - Siret : 487 080 442 000 14 - Code APE : 2221 Z - TVA Intracommunautaire : FR 67 487 080 442