

POLYOLS • ISOCYANATE (TDI, MDI)

ADDITIVES • ADHESIVES • RELEASE AGENTS



ABOUT US

We started in 2010, and foam cutting was our core activity. In addition, we were selling cutting machines and foaming equipment.

Together with our team, we designed and built some of the machines and equipment we are work with even today. We worked hard and we invested every penny in the development of our company.

We have been present as exhibitor at all major international fairs, from Mexico to the Arabian Emirates, from China to Germany, from the Netherlands to Serbia.

We traveled all over the world, on all continents, with our products, with our knives – especially, and that's how we succeeded to export today in over 65 countries all over the world.

MARIUS POPA
Bestfoam's Owner

OUR MISSION

To promptly provide solutions and products for foaming & processing of flexible PU foam, acting under the motto:
BEST SOLUTIONS FOR ALL YOUR NEEDS.

OUR VISION

Be the Partner who advices you to choose the correct products, propose you the best solutions for your needs, at an unbeatable level of price, quality and delivery time.



OUR VALUES

COMMITMENT

CUSTOMER ORIENTATION

INTEGRITY

COST MANAGEMENT

WIN-WIN

COMMITMENT. We keep our promises. We take responsibility for our actions.

CUSTOMER ORIENTATION. We treat our clients as we would like to be treated, and as they expect to be treated.

INTEGRITY. Act ethically and fairly in our daily work and our decisions.

COST AWARENESS. Keeping costs under control is key to having a healthy business and the best offer for our clients.

WIN-WIN. We create value for all of us, clients, suppliers, partners, our company.



OUR GROUP



BESTFOAM

since 2010

Production of band knives for cutting machines, foam processing, mold foaming, distribution of equipment for foam industry.



KA&MA TRADING

since 2011

Production of sleeping articles: mattresses, cushions, pillows, beds, and sofas.



PUR CHEMICALS SOLUTIONS

since 2017

Distribution of chemicals and additives for production of flexible PU foam.



KOMFORT MOBELKOLLEKTION

since 2020

Production of upholstery furniture: beds and sofas.



CHEMICALS SOLUTIONS

MORE THAN JUST A PRICE

CUSTOMER SOLUTIONS

AND TECHNICAL SUPPORT

A WIDE RANGE OF PRODUCTS

We can deliver all the chemicals you need, from making foam or recycling foam to using in the manufacturing process of a large variety of goods across industries:

Polyether polyols, toluene di-isocyanate, bi-component system and MDI binder for recycling foam, hot melt adhesives, solvent/water-based adhesives, special additives and chemicals (for plastics, ceramics), trim foam, release agents for PU foam and automotive.

A LARGE VARIETY OF APPLICATIONS

When combining polyether polyols with di-isocyanate, one can be used in urethane applications, such as flexible foam, in coatings, adhesives, sealants and elastomer systems.

As a result, one can be used in a large variety of goods, including furniture, car seatings, bedding, paints and coatings, artificial sport tracks, playground surfaces, ski suits, and other waterproof wear.

Industries like furniture, building construction, automotive are the first ones to use polyether or polyester foam as flexible or rigid structure, open cells or closed cells.

OUR EXPERTISE YOUR BACKUP

We have been in foam industry for years, producing and processing foam, and willing to share our best practice with you.

Using all our expertise and good practice in foam production, with our specialized people in chemicals trading, sourcing and consultancy, we are in the best position to provide you with technical advice for choosing the correct price/quality ratio and the most suitable solutions for your specific needs.

OUR TECHNICAL SUPPORT YOUR CONTROL OF PROCESS

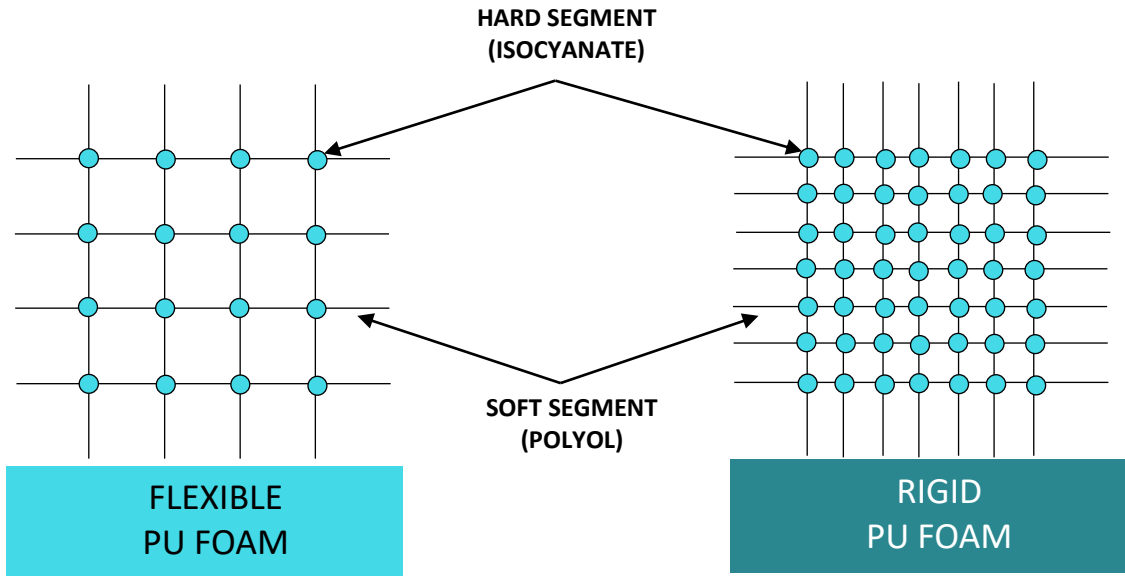
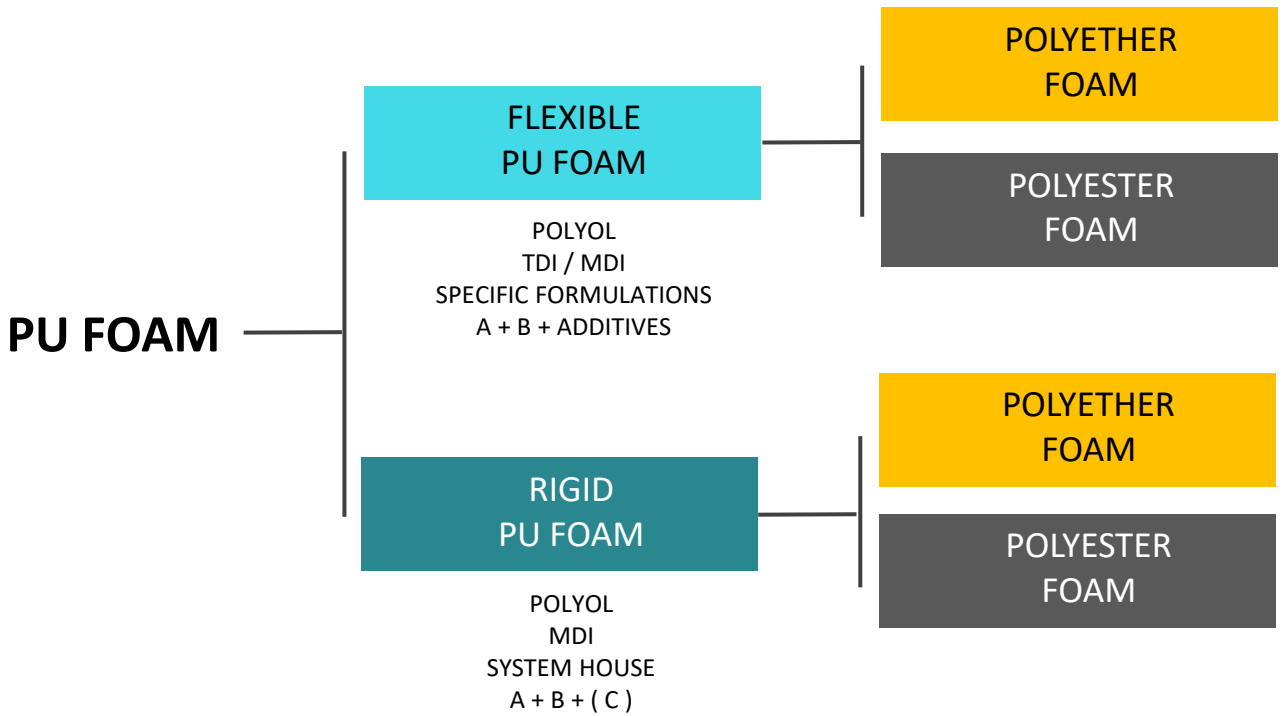
We assist you from the very beginning, where the best formulas are needed to produce good quality foam, all along the testing process, so that, in the end of the process, the results to be in accordance with your needs, requirements and expectations.

We use reliable sourcing, to offer you good quality products, at correct price level and that meet the expected delivery terms and conditions.

Focused on long term partnerships and win-win principle, we provide solutions and technical support for making flexible and/or rigid polyurethane foam, for recycling trim foam by making rebond foam, that can be used in various industries like upholstery, bedding, mattresses, medicals, automotive, hygiene and many others.

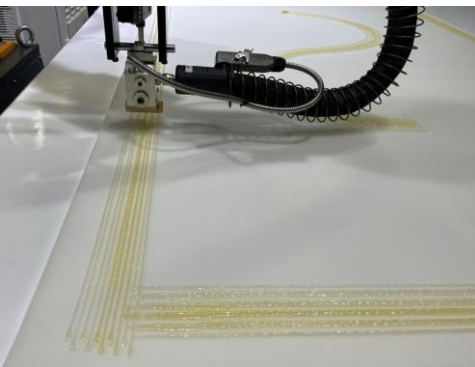
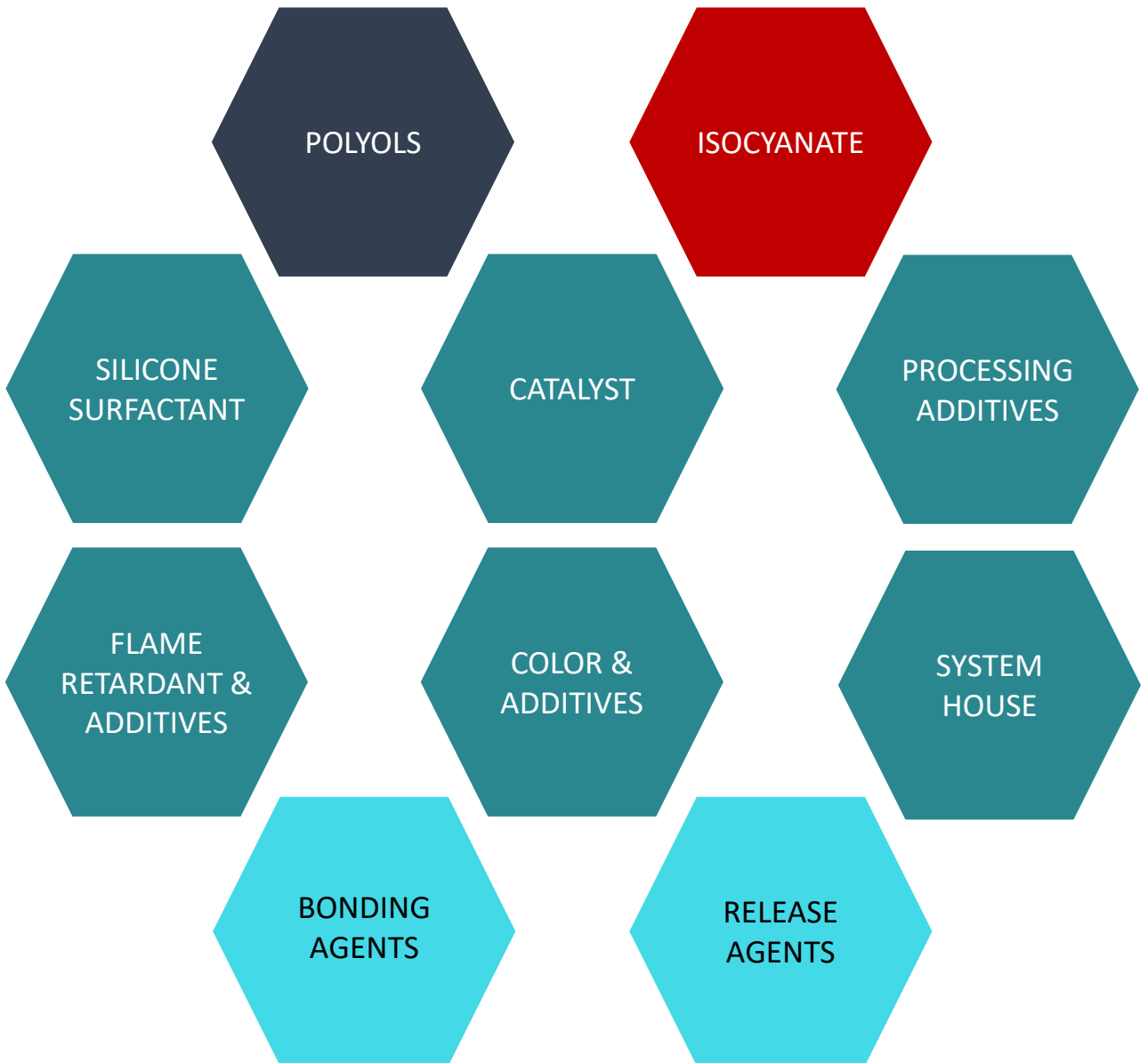


PU FOAM



PRODUCT RANGE

WE DELIVER CHEMICALS
FROM MAKING OR RECYCLING FOAM
TO A LARGE VARIETY OF APPLICATIONS



APPLICATIONS

TDI AND POLYOLS

When combining polyether polyols with TDI – toluene diisocyanate, one can be used in urethane applications, such as flexible foam, in coatings, adhesives, sealants and elastomer systems. As a result, one can be used in a large variety of goods, including furniture, car seatings, bedding, paints and coatings, artificial sport tracks, playground surfaces, ski suits, and other waterproof wear.



MDI

MDI - methylene diphenyl diisocyanate is a very versatile molecule that delivers different performance properties for a variety of applications.

Primary use for MDI, related to foam industry, is the fabrication of rebond foam. The foam flocks coming from the shredder are blown into the mixing drum, where stirred and mixed with MDI. With or without use of water, the adhesive enables the foam flakes to stick together.

HOTMELT ADHESIVES

APAO – mainly used to bond fabrics to foam in the mattresses,
EVA – has very fast open time, mainly used for automatic machines for bonding pocket springs,
PSA – known as pressure sensitive adhesive, it remains always open, it means always sticky, can be good or bad, depending on the applications. Whereas in mattresses industry is not recommended because of making noise, it can be used sometimes in sofa industry.

ADDITIVES

Even though they come only in small quantities in the composition of foam, besides TDI and polyols, the importance of these agents cannot be neglected.

Apart from water, that can be considered an additive in the reaction of TDI and polyols, other additives can be added as agents, depending on the final needs and use: colorants, anti-oxidants, stabilizers, flame retardant agent.

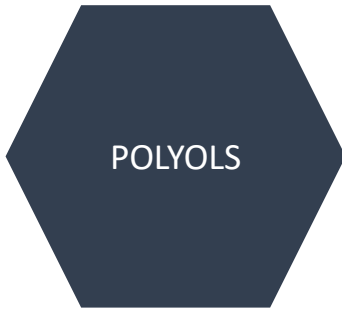
RELEASE AGENTS

The role of a release agent is to prevent other materials from bonding to surfaces.

In foam industry, when talking about mold foaming, the material is the foam, the surface is the interior of the mold, and the release agent comes as a solution to release the material from the mold, after the forming process is done.



POLYOLS



In organic chemistry, a polyol is an organic compound containing multiple hydroxyl groups ($-OH$). They are versatile compounds that serve a multitude of purposes. The two primary types of polyols are polyether polyols and polyester polyols. There are also polymer polyols which are essentially modified variants of the first two types of polyols. Polyols of varying molecular weight, functionality, viscosity and reactivity can be produced. They are liquid under room temperature, not classified for physical hazards. They are not flammable, but they will burn.

PROPERTIES

Hydroxyl Value (VOH) – The number of reactive hydroxyl groups (OH) on the polyol directly impacts the quantity of urethane linkages, which greatly influences the physical properties of the final PU product.

Acid Value (VA) – should be as low as possible, otherwise it will bring adverse effects on processing and product performance, so it is particularly important to determine the acid value.

Water Content – In addition to density and basic mechanical properties, the water content affects the gelation time and thermal conductivity of polyurethane.

POLYETHER POLYOLS

POLYETHER POLYOLS are polymerized products, made by reacting organic oxide and glycol. Main organic oxide utilized are ethylene oxide, propylene oxide. Main glycols utilized are ethylene glycol, propylene glycol, glycerine, sorbitol, sucrose, water and amines. These polyols are known for their secondary hydroxyl groups, which make them highly reactive.

One of the defining features of polyether polyols is their high molecular weight. This gives them the ability to produce foam with excellent cushioning properties. Additionally, they are relatively easy to handle and store, making them a popular choice for many manufacturers.

They are commonly used in the production of flexible foam, often found in furniture and bedding, as well as in rigid foam, used for insulation. Polyether polyols account for about 90% of the polymeric polyols used industrially; the balance consists of polyester polyols.

POLYPROPYLENE GLYCOLS	Elastomers PU flexible foam PU rigid foam
POLYOXIDE OF TETRA-METHYLENE GLYCOL (PTMEG)	Elastomers Fibers of PU
MANNICH POLYOLS	Foams in spray at low temperature

POLYOLS

POLYESTER POLYOLS

POLYESTER POLYOLS are produced through the reaction of terephthalic acid with various alcohols.

Unlike polyether polyols, polyester polyols have primary hydroxyl groups, which make them less reactive but more resistant to hydrolysis.

Polyester polyols offer a wide range of properties, including better adhesion and higher resistance to solvents and chemicals compared to their polyether counterparts.

Their wide range of properties makes them ideal for coatings, adhesives, and high-performance elastomers. Polyester polyols can also be used to produce rigid foam.

POLYMERIC POLYOLS

POLYMERIC POLYOLS are essentially polyether or polyester polyols that have been modified with styrene acrylonitrile (SAN) or other polymers to improve their functionality. In the classification below, the percentage represents the content of SAN.

POLYMERIC POLYOL 10%-13%	used to produce high load bearing flexible foam.
POLYMERIC POLYOL 15%	used to produce higher load bearing flexible foam.
POLYMERIC POLYOL 25%	it has been found to produce flexible foams having 40-50% higher hardness than conventional polyether polyol based foams.
POLYMERIC POLYOL 45%	designed primarily for use in full density range of high foam bearing flexible slab stock foams.

POLYOLS FROM VEGETABLE OILS

Although vegetable oils are not naturally present as polymers, they are precursors for monomer chains that can be used to synthesize various polymers including polyurethane, polyester, polyether and polyolefin. Used for making rigid foam.



ISOCYANATE

ISOCYANATE



In organic chemistry, isocyanate is the functional group with the formula $R-N=C=O$. Organic compounds that contain an isocyanate group are referred to as isocyanates. An organic compound with two isocyanate groups is known as a diisocyanate. Di-isocyanates are manufactured for production of polyurethanes, a class of polymers.

Common types of isocyanates are:

MDI - methylene diphenyl diisocyanate, TDI - toluene diisocyanate, HDI - hexamethylene diisocyanate, IPDI - isophorone diisocyanate. The 2 main types of isocyanates, MDI and TDI, are found on the market in the proportions of 60% and 35% respectively.

TDI – TOLUENE DI-ISOCYANATE

TDI – TOLUENE DI-ISOCYANATES are a mixture of 2 isomers in various ratios between the two.

Example: TDI80/20 comes in the combination:

Toluene-2, 4-diisocyanate (2,4-TDI) – 80%

Toluene-2, 6-diisocyanate (2,6-TDI) – 20%

TDI 65/35 is still the same type of isocyanate, but with different ratio of isomers. It is used in few cases for making flexible foams. Possibly used in the synthesis of memory foam, or polyester foam.

Toluene-2, 4-diisocyanate (2,4-TDI) – 65%

Toluene-2, 6-diisocyanate (2,6-TDI) – 35%

TDI is not found naturally in the environment. TDI is a clear liquid with low viscosity at room temperature. TDI is insoluble in water. It is miscible with alcohols, di-glycols, mono-ethyl ether, ethers, acetones, carbon, benzene, chlorobenzene, kerosene and olive oil. TDI is a reactive compound used in combination with polyether polyols and polymer polyols for the production of polyurethane foams.

When combining polyether polyols with TDI – toluene diisocyanate, one can be used in urethane applications, such as flexible foam, in coatings, adhesives, sealants and elastomer systems. As a result, one can be used in a large variety of goods, including furniture, car seatings, bedding, paints and coatings, artificial sport tracks, playground surfaces, ski suits, and other waterproof wear.

IMPORTANT. TDI is a very toxic product. Like other isocyanates, TDI is a highly reactive compound. TDI can react violently with compounds based on active hydrogen atoms (such as alcohol) and can generate enough heat for self-ignition and will result in products toxic combustibles. Other solvents not to be mixed with TDI: water, acids, bases and products strong alkalis, such as sodium hydroxide and tertiary amines.

STORAGE. TDI is sensitive to humidity and heat. Storage is recommended product at temperatures between 15°C - 30°C and avoiding humidity. Under appropriate conditions storage in sealed containers, the product will maintain its properties for 6 months from the date of delivery. For longer periods of time, it is recommended to store the product under the nitrogen blanket. At temperatures below 1°C , the product is crystallized. TDI reacts with water releasing carbon dioxide. During storage, transfer and handling product, contact with water in any form should be avoided.

ISOCYANATE

MDI

MDI - methylene diphenyl diisocyanate is a very versatile molecule that delivers different performance properties for a variety of applications.

Generally used in manufacturing rigid and semi-rigid PU foams. The rigid polyurethane foams are good thermal insulators and used in nearly all freezers and refrigerators worldwide, as well as buildings. It is also used as an industrial strength adhesive, which is available to end consumers as various high-strength bottled glue preparations.

PREPOLYMER MDI

An isocyanate prepolymer is a type of polyurethane prepolymer in which all of the polyol hydroxyl end groups have reacted with isocyanate groups. The end result is a compound with isocyanate functionality at the termini instead of hydroxyls.

It is low functional pre polymer based on monomeric and polymeric MDI suitable for use broad range of flexible, semi-flexible and rebounding applications. When used for making rebound, the foam flocks coming from the shredder are blown into a mixing drum, where stirred and mixed with MDI. With or without use of steam, the adhesive enables the foam flakes to stick together.

MODIFIED MDI

Modified MDI encompasses chemically altered MDI variants, tailored to specific application requirements, and is instrumental in a range of high-performance industries. Properties: Modified MDI is the result of chemical modifications or blending with other compounds to achieve desired properties.

It is low functional pre polymer based on monomeric and polymeric MDI suitable for use broad range of flexible, semi-flexible and rebounding applications. When used for making rebound, the foam flocks coming from the shredder are blown into a mixing drum, where stirred and mixed with MDI. With or without use of steam, the adhesive enables the foam flakes to stick together.

SAFETY. MDI, like the other isocyanates, is an allergen and sensitizer. Persons developing sensitivity to isocyanates may have dangerous systemic reactions to extremely small exposures, including respiratory failure. Handling MDI requires strict engineering controls and personal protective equipment. It is a potentially violently reactive material towards water and other nucleophiles.

STORAGE. Improper MDI disposal contributes to medication wastage and increases the risk of MDI residual propellant release into the atmosphere. HFCs are artificial fluorinated gases that act as potent greenhouse gases (GHGs) when released into the atmosphere.



SILICONE SURFACTANT



Silicone surfactants are a class of chemicals that have a structure that possesses both organic groups and silicon atoms.

They are widely used in various fields to improve interfacial properties, wettability, dispersibility and emulsification performance.

Silicone surfactant plays an important role in the production process of polyurethane foam, such as system dispersion, bubble growth, bubble stabilization and air chamber opening, etc. It is a good foam stabilizer and stabilizer for polyurethane foam. Using its surface activity, it can manufacture polyurethane soft foam, rigid foam, semi-rigid foam and high resilience foam.

In addition, the application of flame-retardant silicone foam stabilizer in polyurethane foam is also more and more extensive.

SILICONE SURFACTANT

FEATURES:

Excellent performance in reducing surface tension.

Excellent wetting performance.

Antifoaming property and foam stabilization property.

Toxicity is basically physiologically inert.

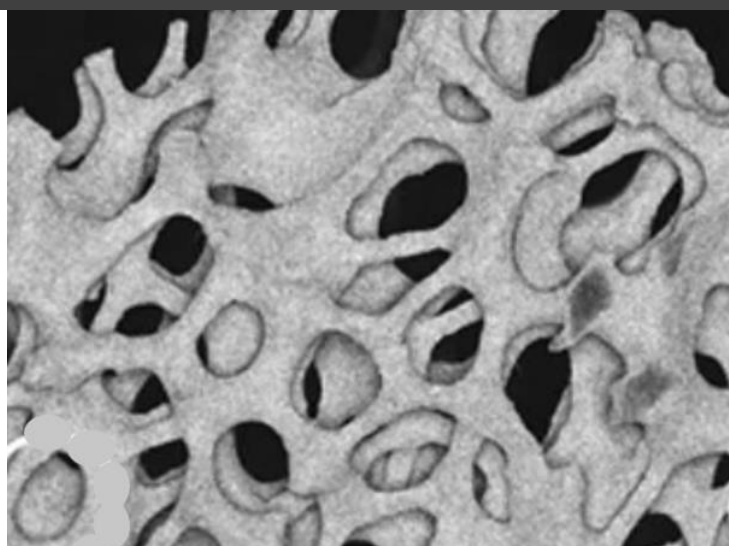
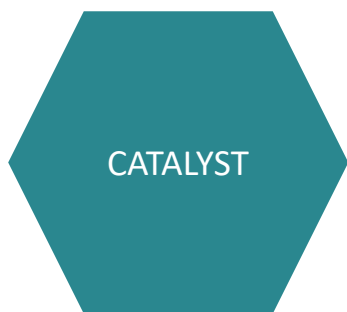
Great emulsifying effect and good matching performance.

DOSAGE:

0,5 – 3,0 php

FOAM TYPE	VISCOSITY	APPLICATION	APPEARANCE	SMELL	SOLUBILITY
FLEXIBLE FOAM	1,000	ALL DENSITIES	LIQUID	NO	SOLUBLE
		LESS THAN 15KG			
		HIGH AIR POROSITY			
15,000	HR FOAM / TDY MEMORY				
RIGID FOAM	1,000	MDI FOAM			
		ALL DENSITIES			

CATALYST



Generally, a catalyst is defined as a substance that enables a chemical reaction to proceed at a usually faster rate or under different conditions than otherwise possible, or an agent that provokes or speeds significant change or action.

AMINE CATALYST is used to control and/or balance both the gelling reaction and the gas-forming or foaming reaction responsible for foam formation.

A substance containing tin while performing a catalytic function is called a **TIN CATALYST**. Tin is a silvery metal that has a low melting point. They are most commonly used in organic synthesis, particularly in the production of polymers and fine chemicals.

While the precious metals in most catalysts are rare and could eventually run out, **POTASSIUM** is an abundant element on Earth. Potassium octoate supports the isocyanate reaction and is used in a wide variety of rigid foam applications.

AMINE / TIN CATALYST

FEATURES:

Blowing (gas generation) reaction: CO₂ gas generation for open cells.

Gelling (polymerization) reaction: Urethane reaction for close cell

What happens when AMINE
shortage – Slow CT/RT, less open cell, less air flow
excess – Quick CT/RT, more open cell, foam split

What happens when TIN
shortage – Foam split, collapse
excess – Closer cell, shrinkage

DOSAGE:

Amine: 0,1 – 0,5 php

Tin: 0,1 – 2,0 php

FOAM TYPE	CATALYST	VISCOSITIES	REMARKS
FLEXIBLE FOAM	AMINE	200	33.0%
		20	70.0%
		50	MIXTURE
RIGID FOAM	TIN	1,000	28.0%
		9,000	15,5%
		22,000	14.0%
	POTASSIUM (K)		

PROCESSING ADDITIVES

PROCESSING ADDITIVES



PROCESSING ADDITIVES

Improve the quality of the foam
Gives different properties for the foam

ANTI-SPLITTING AGENT

FEATURES

Ties up the cell preventing splitting of the foam surface.
Effective on 5-20% CaCO₃ contained PU foam.
Tin catalyst's dosage needs to be decreased by 5-20%.
Total production cost can be reduced.

APPLICATIONS

All types of foam.

DOSAGE

0.5 – 2.0 php

PHYSICAL PROPERTY	SPECIFICATION
APPEARANCE	CLEAR LIQUID
VISCOSITY (25°C, cps)	5500
OH VALUE, mgKOH/g	1000

FOAM ELONGATOR

FEATURES

Increase foam tear strength with elongation and tensile strength.
Effective in the parts of edge and round in mattresses and sofas.
Good property against robbing stress and excellent durability.
Effective in the parts of using together with elastic and rubber band.

APPLICATIONS

Band and bra string and tape,
mattresses and sofas, kitchen
cleaning foam.

DOSAGE

10 – 15 php

PHYSICAL PROPERTY	SPECIFICATION
APPEARANCE	CLEAR LIQUID
VISCOSITY (25°C, cps)	530 +/- 50
OH VALUE, mgKOH/g	240 +/- 10

PROCESSING ADDITIVES

FOAM HARDENER

FEATURES

Foam hardener can be used to partially replaces POP
In case of using CaCO₃ as mineral filler it is more effective

APPLICATIONS

Mattresses, sofas, toppers, cushions.

DOSAGE

2.0 – 10.0 php

PHYSICAL PROPERTY	SPECIFICATION	
APPEARANCE	YELLOWISH LIQUID	MILKY LIQUID
VISCOSITY (25 ^o C, cps)	4000	600
OH VALUE, mgKOH/g	300 +/- 15	150 +/- 15
APPLIED DENSITY	LOW DENSITY	ALL DENSITIES
DOSAGE	2.0 - 4.0	10

FOAM SOFTENER

FEATURES

Reduces the hardness of the foam
Gives comfortable feeling and rubber-like soft texture
SSF 5.0 php → softness 30%
SSF 7.0 php → softness 50%

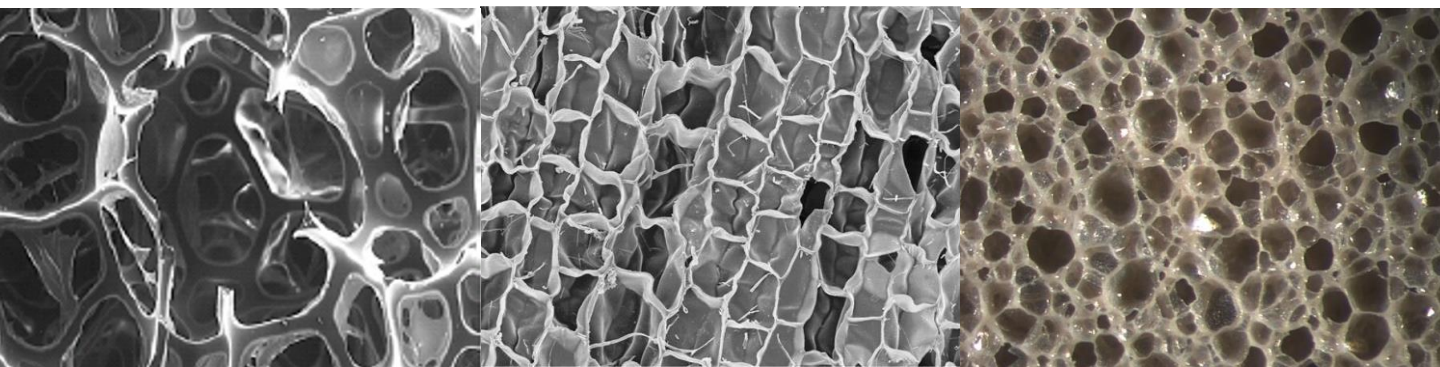
APPLICATIONS

Mattresses, sofas, toppers, cushions.

DOSAGE

5.0 – 10.0 php

PHYSICAL PROPERTY	SPECIFICATION
APPEARANCE	CLEAR LIQUID
VISCOSITY (25 ^o C, cps)	10
OH VALUE, mgKOH/g	355



FLAME RETARDANTS & ADDITIVES

FLAME RETARDANTS & ADDITIVES



FLAME RETARDANTS & ADDITIVES

There are 2 types of retardants, depending on their reactivity with the base material: reactive and non-reactive retardants. The reactive retardants enter in the composition of material with modification of the physico-chemicals properties of material. The non-reactive retardants don't modify the properties of the base material, as they are applied only at the surface of the material to be treated. In this case, it is recommended to immerse the material into a bath of solution.

FLAME RETARDANT

FEATURES

They are mixed with the base material with modification of the physico-chemicals properties

APPLICATIONS

Mattresses and furniture foam
Automotive and industrial foam
Electric & Electronics

DOSAGE

10.0 – 15.0 php

APPLICATION	P(%)	Cl(%)
FURNITURE	12	27
AUTOMOTIVE	11	29
ELECTRONICS	10	

ULTRA FR AGENT

FEATURES

Premium FR agent by spray and dipping system for PU foam.
Unique and excellent fire-proof property.
Keep an initial PU foam property: softness, sound-absorption property.

ADVANTAGES:

No ignition.
No change from initial appearance after fire
Maintain PU foam physical property
Available in 5 colors.

APPLICATIONS

Air conditioner, refrigerator and electric generator.
Airplane, cruise & merchant ship, automotive, & heavy equipment
Construction industry where the sound absorption required

DOSAGE

2-component system

TYPE	APPEARANCE	VISCOSITY (25°C, cps)	Sp. Gr. (25°C)	DIRECTIONS
WATER TYPE	LIQUID	100	1.05 - 1.10	SPRAY / DIPPING

FLAME RETARDANTS & ADDITIVES

FLAME LAMINATION PROMOTOR

FEATURES

Adhesive promoters of flame-lamination between PU foam and fabric.
Designed to improve excellent bonding properties.
FR synergist to be able to improve FR properties.
FR dosage can be decreased to 20-30%.
Consist of polyether polyol, modified polyester polyol and FR product.

DOSAGE

1.0 – 8.0 php

PHISICAL PROPERTY	SPECIFICATION	
APPEARANCE	YELLOWISH LIQUID	
VISCOSITY (25 ⁰ C, cps)	700 - 1000	400
BONDING	GOOD	EXCELLENT
FR	GOOD	
FOG VALUE	LOW	VERY LOW

FLAME LAMINATION POLYOL

FEATURES

No trouble in foaming process.
Promotes excellent properties with flame lamination promoter
More effective when used together with promoter
Synergistic polyol to greatly improve bonding strength.

APPLICATIONS

Flame lamination, sofas, car sheet, head liner

DOSAGE

1.0 to 8.0 php. Used in combination with flame lamination promoter

PHISICAL PROPERTY	SPECIFICATION
APPEARANCE	YELLOWISH LIQUID
VISCOSITY (25 ⁰ C, cps)	3,000
SPECIFIC GRAVITY	1,20



COLOR ADDITIVES

COLOR ADDITIVES



COLOR ADDITIVES

A color additive is a polyol, that enters in the composition of the base material as part of the total volume of polyol. There are 2 types of color additives: reactive and powder.

Whilst the powder can separate from the base material as a solid mass, the reactive colorant is deepening in the mass of the base material, and forms a homogenous material

LIQUID COLOR

FEATURES

- Reactive colorant
- Polyol based
- High concentrated pigment
- Color strength
- Low viscosity and good dispersion
- No flow mark

DOSAGE

0.5 – 8.0 php

AVAILABLE COLORS

POLYETHER PU FOAM COLORANT

Black • Blue • Yellow • Red • Violet • Orange • Green

POLYESTER PU FOAM COLORANT

Black • Blue • Yellow • Red

SHOE SOLE COLORANT

Black • White • Yellow • Red • Blue • Brown

ANTI-DISCOLORING AGENT

FEATURES

- Anti-oxidant
- Prevent foam to get yellowish
- Used in combination with whitening agent

APPLICATIONS

Underwear (Bra-cup), Shoulder pads, Shoes
PU foam

TEST CONDITIONS

SHOES FOAM: QUV Lamp, QUV Suntest, Hydrolysis, Nox (Burn test)
BRA-CUP and SHOULD FOAM: QUV Lamp, Phenolic test, Burnt gas test (Nox), Heat resistance, Hydrolysis

SUPER WHITE COLOR

APPLICATIONS

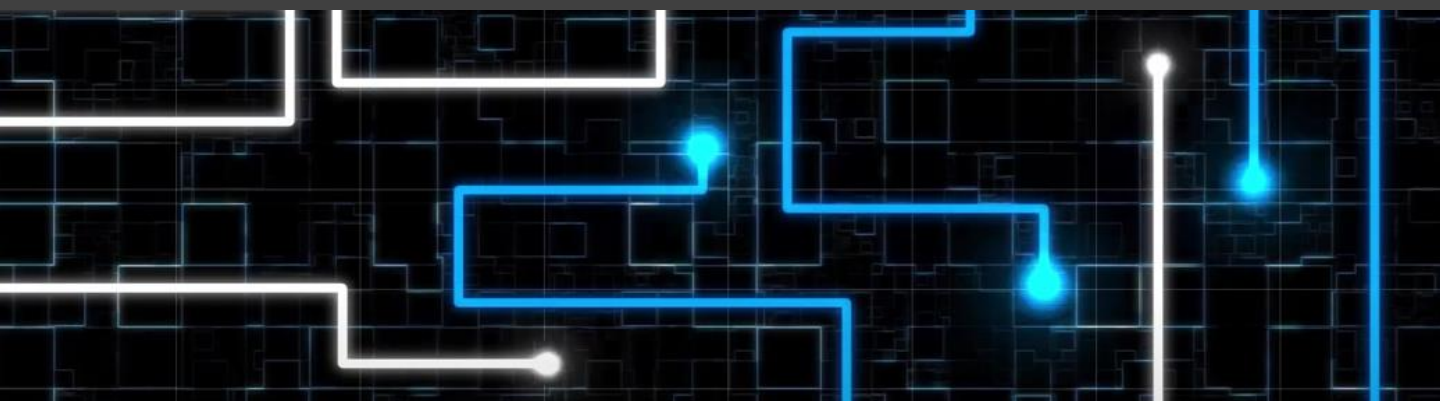
Main application is for more bright white color foam.

In the Bra-cup to improve more the white color
(added about 1.0 php)

AVAILABLE COLORS

Violet white • Blueish white • White

ANTI-STATIC. ANTI-OXIDANT



ANTI-STATIC AGENTS

FEATURES

Static electricity is generated when different materials get into contact, rub each other or get separated from each other. The static electricity can be discharged by using an anti-static agent. The effect range: $10^9\Omega$ - $10^{11}\Omega$

APPLICATIONS

Electrics & Electronics packing PU foam
Filter foam
Sealing foam

DOSAGE

2.0 – 3.0 php

PRODUCT	VISCOSITY (25 ^o C, cps)	APPEARANCE
ANTI-STATIC AGENT	250	CLEAR LIQUID

ANTI-OXIDANTS

ANTI-SCORCHING AGENT

FEATURES

Designed to prevent degradation of PU foam. During the continuous foam process, the core parts reach temperatures over 160°C.

High temperatures and humidity can cause PU foam's discoloration and scorching problems.

APPEARANCE

liquid

APPLICATIONS

Bright and white color
Low density foam with high water or FR agent
High temperature and humidity weather conditions.

DOSAGE

0.5 – 2.0 php

USE

TDI foam and MDI foam

INDOOR COLOR STABILIZER

FEATURES

PU foam is very weak and sensitive against Nox gas circumstances. During storage, the surface color is likely to be changed easily.

Indoor Color Stabilizer can stabilize and inhibit discoloration from the environment

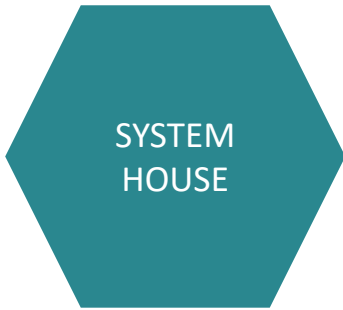
APPLICATIONS

Polyether foam
Polyester foam

DOSAGE

1.0 – 2.0 php

SYSTEM HOUSE



SYSTEM HOUSE

A Systems House is a critical unit in the polyurethane industry. It oversees the formulation of new polyurethane systems on a laboratory scale. Successful systems are subsequently produced on a commercial scale in the blending plant for sale to customers.

The manufacturers of formulated systems (System House) develop, within their own laboratories, special formulations that allow to create foams with physical and chemical characteristics and performance suited to different uses.

Polyurethane Systems House is used in multiple industries - automotive, aerospace, industrial, construction. PU Systems are designed as recipes for foams (e.g., for furniture and insulation), for elastomers, e.g., for automotive.

VISCO-ELASTIC FOAM SYSTEM

FEATURES

Visco-elastic foam is also known as Memory foam and can be designated by customer needs with following details: Density • Hardness • Recovery Time • Cell Openness • Temperature Sensitivity • Surface Softness • Surface Stickiness • Tear and Tensile Strength

USING METHODS

Polyol and modified MDI system should be stored at 24 +/- 2°C.
Polyol system should be vigorously pre-mixed at least 10 min in a working tank for fine cell.
Pre-mixed polyol system should be mixed about 30 sec additionally in a foaming head.
MDI is added in this stage and should be mixed about 10 sec with the pre-polyol system.
Lastly, it is poured on the foaming box.

APPLICATIONS

Mattresses, Topper, Sofas, Cushions

POPULAR SYSTEM

General foam
Density 60kg

Air permeable foam
Density 50kg

ISO System
Modified MDI system

ECONOMIC SYSTEM

Specialized for 50kg density

Using any kinds of most common polymeric MDI

P-MDI is lower price and easily purchased than specific MDI.

SPECIFIC SYSTEM

It is 55kg foam at low sea level area.

It is 50kg foam at 1.000m altitude.

In spite of density difference its quality is almost the same and the feeling is very comfortable.

SYSTEM HOUSE

PILLOW SYSTEM

FEATURES

All densities from 45 to 70kg.
Mixing ratio (polyol system versus MDI)

FOAMING CONDITIONS METHODS

Foaming conditions: mold temperature 50° C,
demolding time 5-6 mins.

APPLICATIONS

Pillow, neck pillow, in-sole, indoor mat.
Pillow size: 45*30*8/10 cm



REMARKS

Polyol system should be mixed about 10 min to make homogenous state.
Specific mixing ratio and using method should be followed.
Also, recommended MDI should be used to satisfy the specific needs.

SEMI-RIGID FOAM SYSTEM

FEATURE

High tensile strength and elongation
High compression strength
Very stable molding properties without brittle and wrinkle
No scorching appearance
Good air porosity

APPLICATIONS

Automobile headliner, automobile sunvisor

SPECIAL FOAM SYSTEM

FEATURES

Special foam system follow new trends and satisfy market specific applications.
In the future, more specific and unique products will be required.
According to new energy innovation, electric automotive and appliance is already coming. EV battery encapsulated system is for the use to fix and protect cylinder battery.
High technology know-how is essential to meet safety against fire, high temperature, and electric conductivity.

APPLICATIONS

In-door shoes, electric vehicles, mattresses



BONDING AGENTS

BONDING AGENTS



BOND BONDING GLUE

Foambond is a high-performance synthetic rubber-based adhesive specially designed for foam-to-foam application, resin to foam, and wood or metal to foam substrates.

Foam bonding refers to forming bonds between multiple foams or foams and other materials. This is realized by applying foam bonding adhesives or glues which create bonds foam to foam or foam to other materials such as metals, plastics, wood and fabric.

When it comes to adhesives, we all know there is no such thing as a one-size fits all solution. While one particular foam adhesive might be a perfect solution in one situation, it might not be in the other. To increase your profitability and ease of use, we work with several adhesive technologies.

SOLVENT TYPE

Due to its excellent final bond strength and versatility, solvent-based adhesives are popular foam adhesive. Solvent-based adhesives contain volatile organic compounds which can be harmful for people and the environment. As the foam bonding adhesives market is shifting towards more sustainable solutions, we notice the use of solvent-based adhesives declining and global regulations on solvents increasing. Therefore, we see our customers prefer the use of other, less hazardous adhesive technologies.

HOT MELT TYPE

Hot melt glue offer a long shelf life, minimal waste, ease-of-use, and a wide range of formulations. At first glance, hot melt seems like the perfect solution because it has the fastest curing process, provides a strong bond without the evaporation of solvents or water and is easily integrated into an automated process. In certain applications, such as topper mattresses, hot melt can be 'noisy' and make a cracking noise once cured. Also, because hot melt is often applied in bead or swirl patron, the end bond strength of hot melt bonds is different compared to a full surface water-based application, which could impact quality and durability.

WATER TYPE

Water-based adhesives deliver superior final bonding strength along with flexibility and soft bond lines which makes this technology the superior solution. Thanks to the composition and properties of our water-based adhesives it is the best option in terms of bonding quality, comfort and long-term durability while also providing the added benefit of being environmentally friendly and safe for your employees. Further, when roll packing mattresses, water-based is the best option to ensure full recovery upon opening.



BONDING AGENTS



SHREDDING

The first step in the rebond foaming is to get shredded the foam flocks out of the trim foam. A knife shredding type machine is the suitable model for shredding various materials, such as: PU, PE, PVC, EVA, TPR, TPE, PP, PE.

The foam flakes coming out from the shredder are blown into the mixing drum where they are mixed with adhesive. The mixture is dropped into a standard size mold where it is hydraulically pressurized to become rebound foam. The process can be carried out without or with an additional steam system.

RE-BONDING PROCESS

Rebond foam is obtained using shredded recycled foams with scraps of other foams. The foam scraps are mixed with liquid polyurethane to bind them and then compressed into a block. It has an open cell structure and is known for its firm and durable properties.

RE-BONDING GLUE

STEAM TYPE. Injection steam 80°C – 100°C / 1 block production time 15-20 min

NON-STEAM TYPE. Water, bonding agent / 1 block production 60-70 min

ADVANTAGE

Provide excellent adhesion properties with the low dosage

Save the total production cost by lowering dosage, and shorten the steam time and working time

No bonding lump inside of the re-bonding block

DOSAGE

8-15 kg per 100 kg foam scrap



RELEASE AGENTS

RELEASE AGENTS



RELEASE AGENTS

A release agent (also mold release agent, release coating, or mold release coating) is a chemical used to prevent other materials from bonding to surfaces. Release agents aid in processes involving mold release, die-cast release, plastic release, adhesive release, and tire and web release.

Release agents provide easy and non-deformable release of the product from the mold by forming a layer between the polyurethane and the mold. The release agents are used in flexible polyurethane foam, integral foam and RIM applications in automotive industry. Release agents provide easy and non-deformable release of the product from the mold by forming a layer between the polyurethane and the mold

ADVANTAGES

- Ease of application
- Production efficiency with the advantage of weight
- Cost benefit
- Smooth skin appearance
- High system performance
- Skin alternatives with different characteristics

APPLICATIONS

- Flexible and rigid foam injection
- Footwear Industry
- Automotive Industry
- Furniture Industry
- Construction Industry
- Insulation applications

WATER-BASED RELEASE AGENT

Specifically formulated for different applications. Suitable for eva and rubber manufacturing, double density polyester polyurethane direct injection soles, slippers and shoes, low-density rigid PU foam, microporous PU applications.

SOLVENT-BASED RELEASE AGENT

Specifically formulated for different applications. Suitable for slippers, slipper soles, safety shoes injection, PU boot applications, memory foam applications, low- and high-density rigid PU foam.



RELEASE AGENTS

RELEASE AGENTS FOR PU FOAM

Polyurethane foam release agents are a chemical specially designed for the final application of the product. This product has a very high added value for the customer, and the choice of one release agent or others can be linked to many factors such as environmental impact, cost of use or efficiency.

RELEASE AGENTS FOR AUTOMOTIVE INDUSTRY

APPLICATIONS

Steering Wheel, Dashboard, Mat, Mudguard, Armrest, Bumper, Bicycle seat, Electrical cable cover

ADVANTAGES

Flexibility, fast curing, smooth skin, suitable skin thickness, regular cell structure, short demolding times, different hardness alternatives, different demolding times alternatives, wide (molded) density range.

WATERPROOF AGENTS FOR MANUFACTURED BOARDS

functional chemicals for various types of engineer board like the emulsions of water-proof & water-repellent agent, release agent, lubricant and anti-slip agent.

ADDITIVE DISPERSIONS FOR PLASTICS

Additive Dispersions are widely used in the rubber and plastics industries to deliver usability, improved process efficiency and enhanced performance. Products can be tailored for viscosity, degree of dispersion, additive content and / or color tolerance

ADDITIVES FOR CERAMICS

These products include organic lubricants, deflocculants, and binders for ceramics molding. They have been used for many years in various molding processes, including press molding, cast molding, extrusion, and sheet molding. In recent years, we have also begun offering binders for injection molding.

DISPERSIONS AND EMULSIONS OF FUNCTIONAL POLYMERS

A dispersion is when small, water-insoluble particles are mixed in a liquid. Dispersion polymerization is defined as a heterogeneous polymerization process that starts from a homogeneous solution of all the starting materials (i.e., monomer, initiator, stabilizer, additive, etc.), whereas the polymer microspheres precipitate out during the progress of the polymerization.

An emulsion is a uniform mixture of two immiscible liquids. Emulsion polymers have gained industrial interest because on one hand, they substitute polymers produced by less environmentally friendly methods (notably through solvent-based synthesis) and on the other, they present unique application properties. Polymer emulsions show adhesive properties and can solidify in a small duration of time.

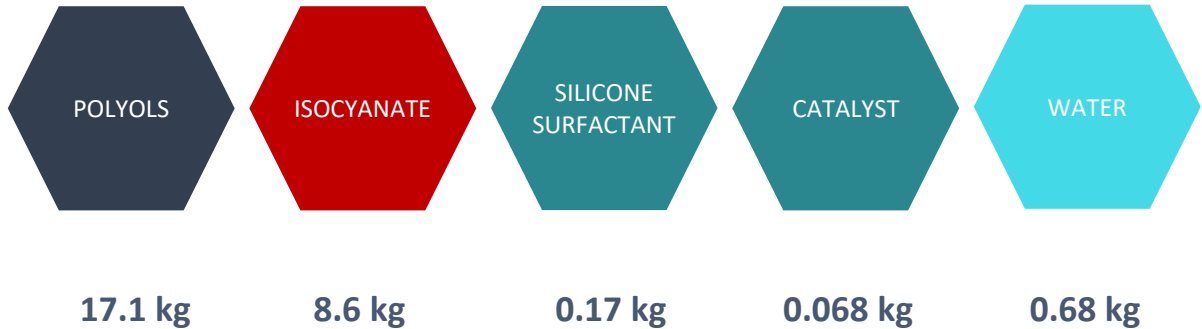
ADVANTAGES. Control of particle size, stability and easier handling, lower the risk of uncontrolled polymerization, economy of energy, versatility resulting in a large range of applications.



PU FOAMING

TYPICAL FLEXIBLE PU FOAM FORMULATION

Quantities being required to produce 1 m³ of flexible foam with a density of 25 kg/m³



CONTINUOUS FOAMING

PROCESS

All the PU chemicals are first put together in a mixing chamber, and then taken into a metal trough and sprayer where the initial reaction takes place.

The rising foam then passes from the top of the trough to a variable width fall plate, which then leads the expanding foam block along a metal slat conveyor for further expansion.

CONTROL

The machine is equipped with PLC Digital Touch Screen System and can be controlled over the internet for optimized production costs.

The machine allows changing the formulation according to customer's request, without stopping the machine, and with no need for test flow. The resistance degree can reach 3-5 international standards.

APPLICATIONS

Continuous foaming requires a foaming equipment for manufacturing soft PU products with densities between 8 and 70 kg/m³. A multitude of different formulas of foam can be saved, adjusted and changed at any time.

The materials can be then used in industries such as Upholstery, Mattresses, Packaging, Shoes, Cloths, Electricals and Automotive.



PU FOAMING



BATCH FOAMING

With a mixing tank capacity of 180-250 l, the foaming installation is intended to mix 6 groups of chemicals, at a mixing speed of up to 2.800 rpm. The mixture can be then poured in square molds of size L2000*W2000*H1200m or in cylinder molds of size Diam2200*H2200.

AUTOMATIC FOAMING

Intended to produce soft PU foam of densities up to 50 kg/m³. The materials can be used to manufacture beds, furniture and in all kinds of sponge factories.

SEMI-AUTO FOAMING

Foaming machine with pneumatic motion, it can be used with rectangular, cubic and cylindrical molds. The speed of the mixer can be controlled electronically from the control panel. Small quantities of raw materials are put into the tank manually. The materials can be used to manufacture beds, furniture and in all kinds of sponge factories.

MOLD FOAMING

Unlike continuous foaming, molded foams are usually produced in a discontinuous process. Foam molding is used to create products with intricate shapes such as seat cushions, paddings, head restraints, dampers, and construction materials.

This process involves pouring or injecting the components through a mixing head and into a preheated mold. The components react inside the mold causing the system to foam and rise.

The molded foam process can be further divided into the hot-molded foam process and the cold-molded foam process. As their name suggests, they are classified according to the mold temperature.

The hot-molded process involves conventional polyether mixed with TDI. The cold-mold process, on the other hand, uses polymer systems prepared from polyether and a blend of TDI and MDI, or 100% MDI. The faster reaction of MDI results in lower mold temperatures.



FOAM PROBLEMS

MOST COMMON PU FOAM PROBLEMS

Core Scorching (Center temperature exceeding material's oxidation temperature)

- Poor quality polyether polyols.
- Formulation issues: TDI, improper ratio of water to physical blowing agents.
- Climate impact and/or improper storage.

Large Compression Deformation

- Polyether Polyol: functionality less than 2.5, propylene oxide ratio greater than 8%.
- Process Conditions: The reaction center temperature is too low or too high, poor post-curing.
- Process Formula: TDI index too low, excess silicone, low foam air content, high closed-cell content.

Soft Foam (Decreased hardness at same density)

- Polyether polyols: low functionality, low hydroxyl value, high molecular weight.
- Process formulation: slow gelation reaction, water content, blowing agents, TDI index.

Large Cell Size

- Poor mixing: uneven mixing, mixing head speed, mixing head pressure, gas injection.
- Process formulation: silicone oil below lower limit, poor quality octoate tin, slow gelation speed.

Density Higher than Set Value

- Polyether polyols: low activity, high molecular weight.
- Process formulation: silicone oil below lower limit, low TDI index, low foam index.
- Climate conditions: low temperature, high pressure. 30% higher pressure → 10-15% higher density

Collapsed Cells and Hollows (Gas evolution rate greater than gelation rate)

- Polyether polyols: excessive acid value, high impurities, low activity, high molecular weight.
- Process formulation: excess amine, low tin catalyst, low TDI index, insufficient or ineffective silicone oil.
- Low-pressure foaming machine: reduce gas injection and mixing head speed.

Shrinkage (Gelation rate greater than foaming rate)

- High closed-cell ratio, shrinkage during cooling.
- Process conditions: low air and material temperature.
- Process formulation: excessive silicone oil, less amine, more tin, low TDI index.
- Low-pressure foaming machine: increase mixing head speed, increase gas injection.

Moon Pits

- Low-pressure foaming machine: reduce mixing head speed and gas injection.
- High-pressure foaming machine: increase mixing head pressure.
- Silicone oil quality issue.
- Increase amine amount while reducing tin amount to ensure adequate cell opening.



FOAM PROBLEMS

MOST COMMON PU FOAM PROBLEMS

High Closed-Cell Ratio

- Polyether polyols: high epoxy ethane ratio, high activity.
- Process formulation: excessive octoate tin, high isocyanate activity, high crosslinking degree.

Cracking

- Mid and bottom cracks: Excessive amine, fast foaming rate.
- Top cracks: Unbalanced gas-evolution gelation rate
- Internal cracks: Low air temperature, high center temperature, low TDI index, excessive tin.
- Side middle cracks: Increase tin dosage.

Blurred Cell Structure

- Excessive stirring speed.
- High air injection volume.
- Inaccurate metering pump flow.
- Clogged material pipelines and filters.

Poor Ventilation

- Climate conditions: low temperature.
- Raw materials: high polyether polyol content, highly active silicone oil.
- Process formulation: excess tin, or low tin and amine content with the same tin usage, high TDI index.

Smoke during Foaming

- Excessive amine release a large amount of heat during water and TDI reaction.

Foam with White Streaks

- Fast foaming and gelation reaction but slow transfer in continuous foaming.

Brittle Foam

- Excessive water in the formulation leads to excess biuret formation.
- Poor use of tin catalyst, insufficient cross-linking reaction.
- High content of low molecular weight polyether polyols.

Foam Density Lower than Set Value

- Foam index is too high due to inaccurate measurement, high temperature, low pressure.

Foaming with skin, edge skin, and bottom air

- Excessive tin, insufficient amine, slow foaming rate, fast gelation rate, low temperature during continuous foaming.



OUR COMMITMENT

OUR COMMITMENT

We are committed to providing high-quality products and services for our customers' applications. We work closely with our customers to clearly understand their requirements, all along the way, before and after the sales process, looking for the maximum level of customer satisfaction across the entire process.

We provide solutions and technical support so that the results to be in accordance with your needs, requirements and expectations in terms of performance and financial objectives.

We can assist you from the very beginning of your projects, whether in foam production, where the best formulas are needed to produce good quality foam, or other applications in foam industry, where installation and commissioning are needed.

We leverage the expertise of our process engineers, flow process designers, software developers, and system integrators with the objective of achieving quality requirements, cycle times, enabling our customers to improve their productivity and profitability.

Since the very beginning, we are keeping a clear goal in mind: to offer our customers, all over the world, a new alternative in selling the best products and services together with our technical support, knowledge and good practices, for every need.

With attentive services and full technical support for all aspects of needs and requirements of our customers, (including advising, sample production, installation, commissioning, maintenance, training, and spare parts supply), we have become a well-known supplier of chemicals, technical solutions and services.

TECHNICAL ASSISTANCE & SUPPORT

COMPLETE TECHNICAL ASSISTANCE

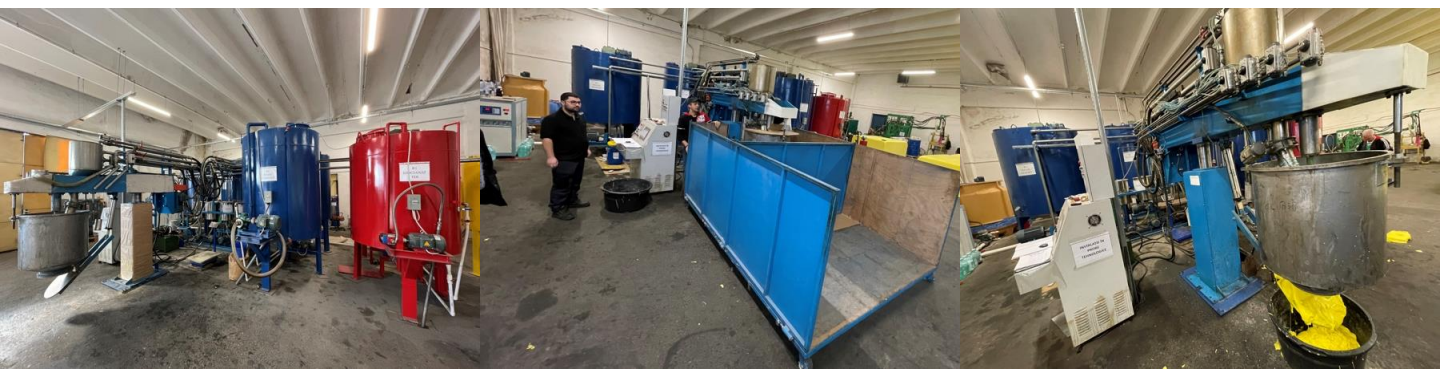
- it means full responsibility for us covering installation, putting into operation and commissioning of equipment. If you choose to do it on your own, then we can assist you in doing it properly.

KNOW-HOW

- it comes from experience and long practice, when errors and failures turned into learned lessons. Nothing can be more precious than someone sharing how to do it, in order that big mistakes to be avoided.

TRAINING & BEST PRACTICES

- are a gold mine for everyone starting with no matter what field of activity. We share with you all we know, and our own practice is your guarantee for a no hassle start of production.



TECHNICAL SUPPORT



PROJECTS

TECHNICAL ASSISTANCE

- covers the tests before running industrial processes. We are there all along the process, until the expected results are obtained. Optimization is also part of our job, since we know that your first expectation and requirement is to have the best results at the minimum costs.

PROTOTYPES

- for development of new products, from the phase of designing till the moment of starting the series production. It also includes our involvement in the setting of the production process.

START-UP FORMULATIONS

- for various densities when willing to produce new materials, including technical discussions about PU quality issues, defining the optimum formulas for production.

PRODUCTION

FEASIBILITY REPORTS

- and layout for new plants installation include the sizing of the production lines, by finding the perfect match between the results required and capabilities of the machines, designing the technological process flows.

OPTIMIZATION

- for polyurethane production or furniture production, intended for cost reduction, by implementing the improved process, insuring the repeatability of the process with the same results.

TAILOR MADE SOLUTIONS

- for all kinds of foam manufacturing, offering the know-how of how to select the raw materials, defining the formulas for production and optimization of the process.



STORAGE

USE OF CHEMICALS. STORAGE AND HANDLING

There are various accidents and problems encountered in the actual foam production, and the production of each accident is caused by many factors.

Very often, the problems and failing in obtaining good quality is given by the use of chemicals, storage and handling the chemicals.



SET OF GOOD PRACTICES ON HOW TO AVOID MISTAKES AND ERRORS

CHOOSE THE RIGHT CHEMICALS

- We strongly advice you to consult and buy chemicals from specialized distributors, who don't only sell you substances but also support you with all necessary knowledge, experience and good practice.
- Choose strong gelling catalyst, silicone surfactant.

USE OF CHEMICALS

- Always read the label on the drum of chemicals before taking or opening the drum for usage. Use chemicals before their expiry date.

PROCESS

- Check, adjust and finetune the formulation with box tests before launching it on the machine.
- Recommended to calibrate all pumps prior to foam production to determine the output and adjust.
- Clean inline filters/strainers and injector nipples on schedule.
- Replace malfunctioned 3-way control valve which redirect flow of chemicals
- Place desiccant beds silica gel inside tank vent pipe.

STORAGE AND HANDLING

- Store the chemicals properly. Any balance of chemicals or unused chemicals must be discharged or kept airtight drums / container. Keep similar chemicals in one location within the store.
- Clearly label all storage and utility containers with distinct marks and keep them closed. Follow chemical storage guidelines from manufacturer such as keeping chemicals in protected, vented, cool, dry place.
- Follow correct procedures on storage, handling and disposal of chemical spillage. Use clean dry utility drums/container to measure, blend or transfer chemicals.

TRAINED PEOPLE

- Train all foaming assistants on how to handle chemicals.
- Wash hands or change hand gloves after handling every chemical.



TRANSPORT



4KG STEEL CAN



20KG PLASTIC BUCKET



20KG STEEL DRUM



50KG STEEL DRUM



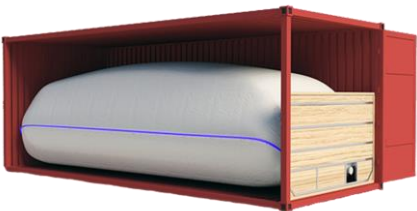
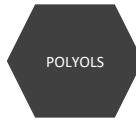
200/250KG STEEL DRUM



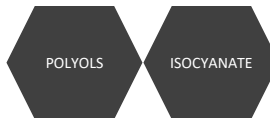
1.000KG IBC TANK



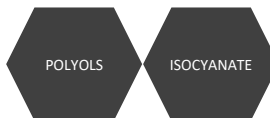
25TO FLEXITANK



25TO ISOTANK



25TO CISTERNA



BAND KNIVES – MADE BY BESTFOAM



HIGH QUALITY

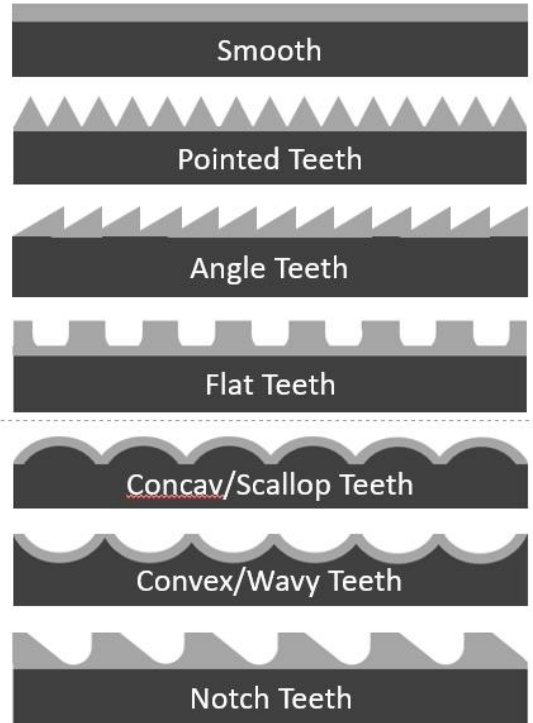
Our band knives are manufactured in Romania using high quality steel and high technology for welding and sharpening.

AVAILABILITY

We export in more than 65 countries, thanks to our high quality, quick delivery and ease of export/import operations.

A LARGE VARIETY OF APPLICATIONS

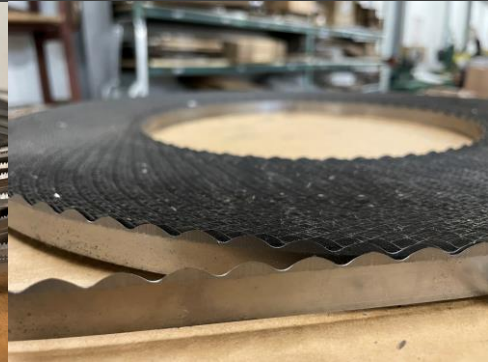
Every blade is tailored to fit your specific needs and applications:
 Buildings, construction, sports, upholstery, bedding, packaging, medicals, automotive.



DB double bevel	DE double edge	UB uneven bevel	WD welded	TD serated
SB single bevel	SE single edge	TW twisted	nonWD continuous	TDI teeth/inch



APPLICATIONS



A LARGE VARIETY OF PROFILES AND SIZES

A large variety of profiles and dimensions are available for an equally as wide range of machines and applications.

WITH OUR KNIVES YOU CAN CUT

Foam (Flexible PU, Memory, Latex, Semirigid Foam), paper, plastic, cloth, leather, EVA, LPDE, CR, EPDM

A WIDE RANGE OF FOAM MACHINES

CNC contour, horizontal/vertical cutting, carousel cutting, profile cutting, peeling, looper cutting.



CNC Contour Cutting

Vertical Cutting

Horizontal Cutting

Carousel Cutting

Profiling

Peeling

Looper Cutting

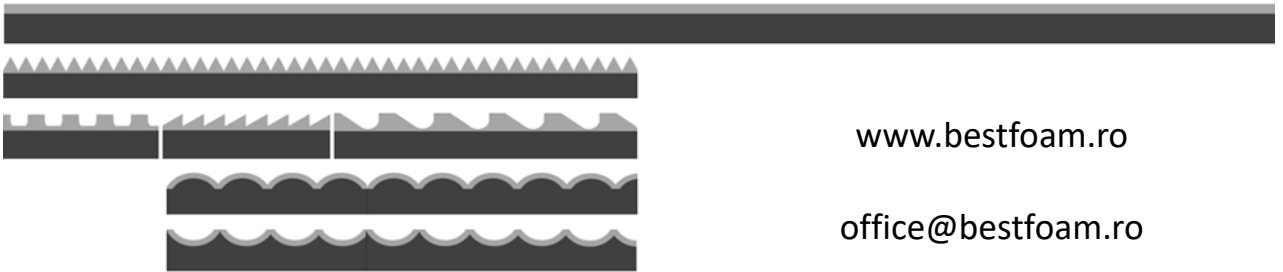
Splitting

Foam (Flexible PU, Memory, Latex, Semirigid Foam) , Matress, Upholstery

EVA, EPDM, CR, LPDE

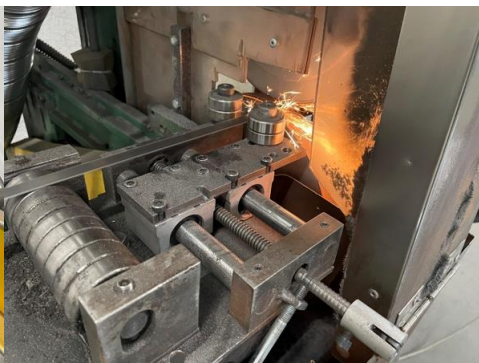
Abrasive Fiber, Sponge Scourer, Synthetic Padding

Garment



www.bestfoam.ro

office@bestfoam.ro



MACHINERY



EQUIPMENT • PERFORMANCE • APPLICATIONS WE OFFER ONLY SOLUTIONS THAT WE TRUST

A large majority of the equipment we offer as solutions to your needs, are found in our own production, so they are tested and proven in terms of performance and fiability in time. Our experience and good practice that we aquired in time come along with our offers for equipment as a guarantee for fesability and reliability of our solutions.



FOAMING. REBONDING

Continuous foaming, batch foaming, mold foaming and rebond foaming equipment, from fully automatic to manual production, chemicals, formulas, testing can be offered.

FOAM CUTTING

Horizontal, vertical foam cutting machines, from manual to automatic machines. Profile cutting, boring, peeling, jointing and laminating machines.

CNC CONTUR CUTTING

Horizontal and vertical CNC contour foam cutting machines. High efficiency CNC contour cutting lines can be built by matching the CNC machines for a complete production process.

QUILTING & EMBROIDERY

High-precision, high-speed computer multi-needle quilting machines and related supporting additional machines for mattress production.

PILLOW & CUSHION FILLING

This system is suitable for making cushions and pillows filled with a mixture of fiber, foam and feather. The line has high productivity, is easy to operate, can be automatic or manual.

MATTRESS PRODUCTION

A mattress production line can be managed and controlled by a MES System, which can receive the production plan and send the task of production plan to each station.

SPRING PRODUCTION

Bonnell and pocket mattress spring production machines, automatic transfer equipment and production lines, of high efficiency and low rate of errors.

WASTE MANAGEMENT

Practically, there is no material that cannot be pressed for further reuse, or for just saving space or for a better convenience to transportation.



FOAMING. FOAM CUTTING. MATTRESSES. WASTE

STRONG PARTNERSHIPS WITH RECOGNIZED SUPPLIERS

Relying on strong partners, we offer you a continuous increase in quality and performance of our solutions, and an exceptional technical support, throughout the lifetime of the machines.



A NEW ALTERNATIVE IN SELLING AND SERVICING EQUIPMENT

Reliability of the machines over time, the operator comfort in production and the proven promptness and availability we have, when we are requested for interventions, either in Romania or abroad.



INSTALLATION & COMMISSIONING. OPERATOR TRAINING

Technical support, know-how, tests before running industrial processes and good practices from our own experience come along with the full responsibility of putting into operation and commissioning of the machines.



FOAM PROCESSING



FOAM CUTTING

Precision foam cutting is an essential process in various industries, including sofas, mattresses, packaging, and furniture manufacturing. It involves the careful and accurate shaping of foam materials to create customized products.

Using our high precision cutting machines, vertical, horizontal, carousel and CNC, we are able to cut complex profiles. We process foam, for many applications across different industries.

MOLD FOAMING

The foam molding process consists of mixing two parts together giving a chemical reaction after dispensing into a mold. The material increases in size until the mold vacuum is completed.

When the foam has hardened and cured, it is separated from the mold and the process is started again. Materials are then controlled for density, hardness, tear strength, fire retardant properties, UV stability.

The key points of the PU molding are the tool design, filling points, material control, trimming and storage of finished products before inspection and dispatch to the customer.

PU TRIM FOAM IN BALES

Mostly used for making rebond foam, to improve the hardness of the end products in upholstery, mattresses, sports padding, but also for making shredded foam, as a filler for pillows, toys, or for being used as is in applications, from furniture to automotive.

One can be found in grade A (no flat, bottom or sides) or grade B (flat, bottom, sides)
Density: 15-50 kg/m³, Color: mixed
Compressed bales 250-450 kg/bale.
Containers: 40' container around 18to.

office@bestfoam.ro



APPLICATIONS



TECHNOLOGY • INNOVATION • DEVELOPMENT WE CREATE, DEVELOP AND FABRICATE FOAM PRODUCTS

FURNITURE

We supply foam products obtained after cutting operations like vertical, horizontal, or CNC contour cutting.

They are intended for the submarkets within the furniture industry: bedding, mattresses, upholstery, garden furniture, office furniture.

Processing materials like flexible PU foam, memory foam and high resilience foam, into an infinite combinations of density, shapes and sizes, is our core business and our specialty.

We are currently working with large sofas companies to develop and supply different foam items for making sofas, tables, beds, dressers, and desks that make rooms ready for use.

TECHNICAL

The technical foam market covers numerous segments from medicals to packaging.

Technical products represent a broad category, where our experience and practice meet your most exigent requirements.

With customers in automotive, medicals and packaging, Bestfoam becomes day by day truly technical.

Our customer data base ranges from the small one-man business to large multinational companies and covers many market sectors.

With our capabilities of cutting vertical, horizontal or contour lines, we can obtain shapes from simple to complex, for many applications.

CONSUMER

From home products to juvenile articles, there are a lot of products that we can help you create, develop and produce.

Our flexibility in production allow us to approach projects whether in small series, or in mass production.

We act as a full-service consumer products foam fabricator, being capable to serve OEMs worldwide with flexible foam solutions from concept though completed, assembled, packaged consumer products foam products – or anywhere in between.

With us, you can achieve measurable cost savings while meeting all your requirements.

PUR CHEMICALS SOLUTIONS SRL

Str. Principala 200,
300570 Buzias,
Timis, Romania
+40 741 228 147
+40 744 920 258



MORE THAN JUST A PRICE
CUSTOMER SOLUTION
AND TECHNICAL SUPPORT



contact@pur-chemicals.ro