

# FISA TEHNICA SPUMA POLIURETANICA

## POLYURETHAN FOAM TECHNICAL DATA SHEET

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                        |                               |                         |                             |         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------|-----------------------------|---------|
| Tip de spuma / Foam grade:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | N2335                                                                                                                  |                               |                         | Clasa spuma :<br>N; D; L; E |         |
| Culori / Colours:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Alb, Galben (603C) , Albastru deschis (317U) , Negru ( 7U 2X) / White, Yellow (603C), Light Blue (317U), Black (7U 2X) |                               |                         | N                           |         |
| Teste standard / Standard tests                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                        |                               |                         |                             |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Frecventa de testare / Testing frequency                                                                               | Standard / Standard           | Min                     | Max                         |         |
| Densitate / Net density                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Fiecare sarja / Each batch<br>3 masuratori pe sarja / 3 measurements per batch                                         | EN ISO 845:2008               | 20.7                    | 25.3                        | [Kg/m³] |
| Duritate 40% / Hardness 40%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Fiecare sarja / Each batch                                                                                             | SR EN ISO 3386-1:2002/A1:2010 | 3.15                    | 3.85                        | [KPa]   |
| Duritate 40% / Hardness 40%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                        | SR EN ISO 2439:2009           | -                       |                             | [N]     |
| Suport factor / Support factor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                        | SR EN ISO 2439:2009           | -                       |                             | -       |
| Elasticitate / Elasticity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Fiecare sarja / Each batch                                                                                             | SR EN ISO 8307:2019           | 30                      | -                           | [%]     |
| Rezistenta la tractiune / Tensile Strength                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | La 6 luni / Each 6 months                                                                                              | EN ISO 1798:2008              | 90                      | -                           | [KPa]   |
| Alungire la rupere / Elongation at break                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | La 6 luni / Each 6 months                                                                                              | EN ISO 1798:2008              | 150                     | -                           | [%]     |
| Rezistenta la compresiune 50% / Compression Set 50%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | La 6 luni / Each 6 months                                                                                              | SR EN ISO 1856:2019           | -                       | 7                           | [%]     |
| Teste pentru rezistenta la foc / Fire Resistance tests                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                        |                               |                         |                             |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ISO 13501                                                                                                              | -                             |                         |                             |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | FMVSS 302                                                                                                              | -                             |                         |                             |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | D451333                                                                                                                | -                             |                         |                             |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | BS 5852 (Crib5)                                                                                                        | -                             |                         |                             |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | FAR 25853 (aeronautic)                                                                                                 | -                             |                         |                             |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | TB 117-2013                                                                                                            | -                             |                         |                             |         |
| Alte tipuri de teste / Others tests                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                        |                               |                         |                             |         |
| CertiPUR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | CertiPur Standard                                                                                                      | OK                            |                         |                             |         |
| OEKO-TEX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | OEKO-TEX Standard 100                                                                                                  | OK                            |                         |                             |         |
| TDA-MDA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | IKEA IOS-MAT-0010                                                                                                      | -                             |                         |                             |         |
| Pierdere in altimii la oboseala / Thickness loss by fatigue                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | IKEA IOS-MAT-0076                                                                                                      | -                             | [%]                     |                             |         |
| Pierdere duritatii la oboseala / Hardness loss by fatigue                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | IKEA IOS-MAT-0076                                                                                                      | -                             | [%]                     |                             |         |
| Continutul de cenusa / Ash content                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | IKEA IOS-MAT-0076                                                                                                      | -                             | [%]                     |                             |         |
| Antistatizare / ESD Antistatic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ANSI/ESD S20.20;<br>ANSI / ESD S541                                                                                    | -                             | [Ω]                     |                             |         |
| Miros / Odor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | NVX15012                                                                                                               | -                             |                         |                             |         |
| Fum / Fogging                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | DIN 75201                                                                                                              | -                             |                         |                             |         |
| Imbatranire 2 / Aging 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | NVC00001                                                                                                               | -                             | [%]                     |                             |         |
| Dimethylfumarate (DMFu)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DIN CEN ISO TS16186                                                                                                    | -                             | 0.1                     | [mg/Kg]                     |         |
| Recomandari de utilizare pentru industria mobilei / Recommended application                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                        |                               |                         |                             |         |
| Spatare si cotiere pentru masini private / Private vehicle backs and armrests<br>Spatare si cotiere pentru uz casnic / Domestic furniture backs and armrests<br>Straturi de componente pentru saltele de uz casnic (exclusiv miezuri) /<br>Component layers for domestic mattresses(excluding cores)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Clasa A (Medie) /<br>Class A (Average)                                                                                 | BS EN ISO 3385:2014           | OK                      |                             |         |
| Captuseala / Padding<br>Perne pentru sezuturi / Scatter cushions<br>Perne de dormit / Pillows                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Clasa L (Usoara) /<br>Class L (Light)                                                                                  | BS EN ISO 3385:2014           | OK                      |                             |         |
| Recomandari pentru roluire - deroluire / Recommendations for rolling - unrolling                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                        |                               |                         |                             |         |
| Blocuri / Blocks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                        |                               |                         |                             |         |
| Sezon Cald / Warm Season                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                        |                               | min.Ø 800-850           |                             |         |
| Sezon Rece / Cold Season                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                        |                               | min.Ø 850-900           |                             |         |
| Recomandare dimensiuni pentru blocuri roluite: + 2.5% fata de dimensiunile necesare (ex: pentru dimensiuni finale 2000 mm, comanda se va emite pe 2050 mm).<br>Nota: Deroluirea trebuie sa se realizeze in maxim 24 ore de la receptie (max. 5 zile de la roluire) tinand cont de urmatoarele aspecte:<br>*folia sa fie desfacuta total;<br>*blocurile sa fie lasate liber cu distanta intre ele, nesuprapuse, pana la revenirea totala (~48 ore);<br>Recommended dimensions for blocks rolled: + 2.5% above requested dimensions. (For eg.: For final dimensions of 2000 mm, the order will be emitted at 2050 mm).<br>Note: Unrolling must be done within 24 hours after reception (max. 5 days after production) tacking into account the following aspects:<br>*the foil has to be completely removed;<br>*blocks must be layed individually with distance between them, not stacked, up to full recovery (~ 48 hours);             |                                                                                                                        |                               |                         |                             |         |
| <div><div><div>Zonele recomandate pentru realizarea masuratorilor pe blocuri scurte</div><div></div></div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                        |                               |                         |                             |         |
| Role / Rolls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                        |                               |                         |                             |         |
| Sezon Cald / Warm Season                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                        |                               | Se va determina / To be |                             |         |
| Sezon Rece / Cold Season                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                        |                               | Se va determina / To be |                             |         |
| Recomandare dimensiuni role comprimate: + 2% pentru grosime fata de dimensiunile necesare (ex: 10 mm grosime dorita, se va comanda 10.2 mm).<br>Nota: Deroluirea trebuie sa se realizeze in maxim 24 ore de la receptie (max. 5 zile de la roluire) tinand cont de urmatoarele aspecte:<br>-folia sa fie desfacuta total;<br>-rolele sa fie lasate libere cu distanta intre ele, nesuprapuse, in pozitie orizontala, pana la revenirea totala (~48 ore);<br>Recommended dimensions for compressed rolls: + 2% above requested dimensions. (For eg.: 10 mm desired thickness, 10.2 mm will be ordered).<br>Note: Unrolling must be done within 24 hours after reception (max. 5 days after production) tacking into account the following aspects:<br>-the foil has to be completely removed;<br>-the rolls should be left free with the distance between them, not stacked, in a horizontal position, up to full recovery (~ 48 hours); |                                                                                                                        |                               |                         |                             |         |
| <div><div><div>layer / thickness</div><div></div></div><div><div>Zonele recomandate pentru realizarea masuratorilor pe blocuri scurte</div><div></div></div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                        |                               |                         |                             |         |
| Tolerante standard NEVEON Romania SRL / NEVEON Romania SRL Standard tolerances                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                        |                               |                         |                             |         |
| Vezi Tolerante Standard NEVEON Romania SRL - EUR-F-PS-0182/RO-EN / See the NEVEON Romania SRL standard tolerances - EUR-F-PS-0182/RO-EN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                        |                               |                         |                             |         |

**Nota:**  
Acest tip de spuma nu este tratat cu ignifugant.  
Caracteristicile fizico-mecanice mentionate in prezenta specificatie tehnica constituie datele de calitate contractuala ale produsului la momentul transferului riscului si anume la predarea acestuia catre cumparator.  
Aceste caracteristici sunt controlate pentru fiecare sarja de produs si/sau la intervale regulate, ca parte a programului NEVEON Romania SRL de asigurare a calitatii. Niciuna dintre aceste date si/sau proprietati nu reprezinta o garantie din punct de vedere juridic ca produsul este adecvat pentru un anumit scop sau utilizare si, in consecinta, NEVEON Romania SRL isi declina orice responsabilitate rezultata din aceasta.

**Note:**  
This type of foam is not treated with flame retardant.  
The aforementioned data shall constitute the agreed contractual quality of the product at the time of passing the risk. The data are controlled at regular intervals as part of our quality assurance program. Neither these data nor the properties of product specimens shall imply any legally binding guarantee of certain properties or of fitness for a specific purpose. No liability of our can be derived therefrom.

## **Informatii Suplimentare:**

### **Recomandari pentru pastrarea spumei flexibile din poliuretan**

In conditii neutre de stocare, spuma flexibila din poliuretan poate fi pastrata pentru o perioada lunga de timp.

In general, nu este posibila o declaratie privind termenul minim de valabilitate, deoarece aceasta depinde de conditiile de depozitare.

Caracteristicile garantate ale spumei poliuretanice flexibile in conditii de livrare vor fi neschimbate pe cat posibil, daca se vor respecta conditiile de depozitare prin utilizarea principiului FIFO:

- depozitarea in spatii bine ventilate
- protectia impotriva radiatiilor UV
- protectia impotriva umezelii si umiditatii aerului
- protectia impotriva solventilor si a substantelor volatile, deoarece acestea sunt absorbite de spumele poliuretanice flexibile.

### **Informatii suplimentare pentru spumele adezivate**

Spumele cu banda adeziva trebuie depozitate la temperatura camerei (20° C), umiditate normala (50-70%) si in absenta radiatiilor UV.

Spumele adezivate pot fi utilizate in conditii normale pe o perioada maxima de 1 an, in functie de tipul de adeziv aplicat. Mai jos sunt informatii in acest sens.

Adeziv din acrilic pur: 1 an

Adeziv din acrilic modificat: 1/2 an

Informatii suplimentare pot fi regasite in Fisele Tehnice aferente adezivului utilizat.

### **Temperatura de aplicare**

Temperatura cea mai favorabila pentru utilizarea spumelor adezivate este in intervalul +18° C pana la +35° C.

Daca lipirea se face la temperaturi scazute, rezistenta initiala a lipirii va fi reduca.

Suprafetele materialelor pe care sunt lipite, trebuie sa fie uscate si curate. Condensarea umiditatii pe suprafetele pe care vor fi lipite (de exemplu, atunci cand sunt transportate obiecte reci intr-o incapere mai calda) trebuie evitata.

Materialele pe care vor fi lipite, trebuie sa fie fara urme de praf, grasimi, ulei si agenti de separare. Vopselele sau acoperirile de protectie trebuie indepartate sau stabilizate.

### **Intretinerea**

Pentru curatarea spumei, se aplica un detergent pentru curatare uscata si se curata zona cu o laveta umeda pentru inlaturarea petelor.

Nu se utilizeaza produse de curatare lichide pentru ca pot deteriora spuma ireversibil.

Pentru curatarea suprafetelor pe care vor fi lipite, utilizati numai o carpa curata si un solvent compatibil cu materialele folosite.

Presiunea de contact ridicat promoveaza contactul total. Presiunea de contact (aproximativ 10-15 N / cm<sup>2</sup>) se aplica manual cu o rola sau o presa de suprafata.

Rezistenta completa a adezivului este atinsa numai dupa cel putin 24 de ore.

Lipirile trebuie realizate astfel incat sa nu apara nici o actiune de parghie. Orice stres de forfecare sau de intindere trebuie sa se poata raspandi pe intreaga suprafata adeziva. Tendintele continue de "peeling" afecteaza elasticitatea permanenta. Evitati stresul la marginile lui.

### **Suprafata finala**

Lipirea produselor se realizeaza pe suprafete netede. Suprafetele aspre necesita o banda adeziva mai groasa.

Urmatoarele sunt exemple de materiale lipite fara probleme: metale, plastice de inalta energie (de exemplu ABS, policarbonat, PVC rigid), lemn neted, piatra si sticla.

Materialele plastice care contin plastifianti necesita o atentie deosebita. Plastifiantul poate provoca schimbari in structura adezivului cu impact pe rezistenta lipiturii care este afectata.

Sunt disponibile spume adezivate pentru majoritatea aplicatiilor, dar in cazul suprafetelor problematice (cum ar fi polietilena, polipropilena, plastice care contin lubrifianti, acoperiri cu pulbere si cauciuc), trebuie sa se efectueze testele corespunzatoare in prealabil.

### **Denegare de responsabilitate**

Toate informatiile si recomandari legate de utilizarea si aplicatiile practice sunt obtinute in urma experientelor practice.

Comparatorul este responsabil pentru determinarea, utilizarea in mod adecvat si specific a produsului achizitionat.

Pentru informatii si recomandari suplimentare va rugam sa consultati reprezentantii NEVEON Romania SRL pentru vanzari.

## **More information**

### **Recommendations for storage of polyurethane flexible foam.**

Under neutral conditions of storage polyurethane flexible foam can be stored for a long-term period.

In general a statement of the minimum shelf life is not possible, as this is dependent on the storage conditions.

Warranted characteristics of flexible polyurethane foam in delivered conditions will be unchanged as far as possible, if following storage conditions will be observed by using the FIFO-principle:

- storage in well-ventilated indoor areas.
- protection against UV radiation
- protection against watery, humidity and air moisture
- protection against solvents and volatile substances, because these are absorbed by flexible polyurethane foams.

### **Additional information for self-adhesive foams**

Foams with adhesive tape should be stored at room temperature (20°C), normal humidity (50–70%) and in absence of UV-radiation.

Adhesive foams can be used under normal conditions for a maximum of 1 year, depending on the type of adhesive applied. Below are information in this regard.

Pure acrylics - 1 year

Modified acrylics - 1/2 year

Additional information can be found in the Technical Data Sheets for the adhesive used.

### **Application temperature**

The most favorable temperature for using adhesive foams is in the range of +18° C to +35° C.

If bonding is done at low temperatures, the initial bond strength will be reduced.

The surfaces of the materials to which they are bonded, must be dry and clean. Condensation of moisture on the surfaces to be glued (eg, when cold objects are transported into a warmer room) should be avoided.

The materials to be glued must be free of dust, grease, oil, and separation agents. Paints or protective coatings should be removed or stabilized.

### **Cleaning**

To clean the foam, apply a dry cleaner and clean the area with a damp cloth to remove stains.

Do not use liquid cleaners as they can damage the foam irreversibly.

To clean the surfaces to be glued, use only a clean cloth and a solvent compatible with the materials used.

The high contact pressure promotes total contact. The contact pressure (approximately 10-15 N / cm<sup>2</sup>) is applied manually with a roller or surface press.

Full adhesive strength is only achieved after at least 24 hours.

Sticks must be made in such a way that no lever action occurs. Any stress of shearing or stretching must be able to spread across the entire surface. Continuous tendencies of "peeling" affect permanent elasticity.

Avoid stress at his edges.

### **Surface finish**

Product bonding is done on smooth surfaces. Rough surfaces require a thicker adhesive tape.

The following are examples of smooth glued materials: metals, high-energy plastics (eg ABS, polycarbonate, rigid PVC), smooth wood, stone and glass.

Plastics containing plasticizers require special attention. The plasticizer may cause changes in the adhesive structure impacting on the solder resistance that is affected.

Adhesive foams are available for most applications, but for problematic surfaces (such as polyethylene, polypropylene, plastics containing

lubricants, powder and rubber coatings), the appropriate tests must be carried out in advance.

### **Denial of responsibility**

All the information and recommendations related to the use and practical applications are obtained from practical experiences.

The buyer is responsible for determining, using appropriately and specifically the purchased product.

For additional information and recommendations, please contact NEVON Romania SRL Sales Representatives.