MATERIAL SAFETY DATA SHEET

MOLITAN ® - flexible polyurethane foam

Conforms to Decree ES 1907/2006

Date of issue: 21. 2. 2002 Revision: 3.4.2023 Edition: 7

1. IDENTIFICATION OF THE SUBSTANCE OR PREPARATION, IDENTIFICATION OF THE MANUFACTURER OR IMPORTER

1.1 Chemical name of the substance/ trade name: Flexible polyurethane foam / MOLITAN ®

1.2 CAS No.: -

1.3 EC No. (EINECS): -

1.4 Common names/synonyms of the substance/ preparation: PUR, flexible polyurethane foam (polyether and polyester types, including recycled foam)

1.5 Recommended purpose of use of the substance/ preparation: Textile, shoe and automotive industries, consumer goods industry and packaging.

1.6 Identification of the manufacturer/ importer:

1.6.1 **Manufacturer:**
1.6.2 **Name or business name:** MOLITAN a.s.
1.6.3 **Registered office or seat:** Mládežnická 3356, 690 02 Břeclav
1.6.4 **Registration No. (IČO):** 27631273
1.6.5 **Phone:** 515 534 617
1.6.6 **Fax:** 515 534 651
1.6.7 **Foreign manufacturer:**
Name or business name: -
Address: -

1.7 Emergency phone number: Address: MEDICA – INFO –Occupational disease clinic
Toxicological information centre (TIS)
Na Bojišti 1
128 08 PRAHA 2
Phone: non-stop: +420 224 919 293 or +420 224 915 402
Fax: +420 224 914 570

2. INFORMATION ON COMPOSITION OF THE SUBSTANCE OR PREPARATION:

2.1 **Chemical characteristic of the product:**
Flexible polyurethane foam is created by the polyaddition of diisocyanates and compounds with hydroxyl group content (polyester polyols, polyether polyols). It is constituted by a network of cells that are mainly open and interconnected.

2.2 **The product contains the following hazardous ingredients and substances with the specified maximum acceptable concentrations in the working atmosphere:**

Identific.:	**Chem. substance name:**	**Concentration (%)**	**Danger symbol// R-phrases**
CAS:	-	-	-
ES (Einecs):	-		
Index No.:	-		

3. HAZARDS IDENTIFICATION OF THE SUBSTANCE OR PREPARATION:

The most serious unfavourable effects on the human health when using the substance/preparation:
Does not have any unfavourable effects on human health.

The most serious unfavourable effects on the environment when using the substance/preparation:
Does not have any unfavourable effects on the environment.

Potential incorrect use of the substance/ preparation: -
Other data: -

4. FIRST AID MEASURES:

4.1 **General measures:** -

4.2 **Inhalation:** -

4.3 **Skin:** -

4.4 **Eyes:** -

4.5 **Ingestion:** -

4.6 **Other data:** -

5. FIRE FIGHTING MEASURES:

5.1 **Suitable extinguishing media:** water, foam or powder fire extinguisher

5.2 **Not to be used:** -

5.3 **Special exposure hazards:** gas products of combustion and thermal decomposition are toxic

5.4 **Special protection equipment for fire-fighters:** self-contained breathing apparatus

5.5 **Other data:** -

6. ACCIDENTAL RELEASE MEASURES:

6.1 **Security measures for personnel protection:** -

6.2 **Security measures for environment protection** -

6.3 **Recommended methods for cleaning and disposal:** -

6.4 **Other data:** -

7. HANDLING AND STORAGE:

7.1 **Handling precautions:** The product is not hazardous during a common handling.

7.2 **Storage:** Keep MOLITAN ® so that no deformations can arise. The storage is to be done in accordance with the standard ČSN 64 0090 Plastics. The MOLITAN ® plastic products must be stored outside any sources of heat (matches, cigarettes, open fire, electric heater).

8. EXPOSITION CONTROLS AND PERSONAL PROTECTION:

8.1 Engineering controls to limit the personal exposure: -

8.2 Control parameters (maximum acceptable concentration in the working atmosphere):

8.3 NPK-P (average) / **NPK-P** (limit) **(mg/m^3):** -

8.4 Personal protection equipment: -

8.4.1 **Respiratory protection:** -
8.4.2 **Eyes protection:** -
8.4.3 **Hands protection:** -
8.4.4 **General body protection:** -

8.5 Other data incl. general hygiene measures: If during the transformation of MOLITAN ® any dust occurs, the dustiness is to be reduced by means of an exhausting equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES:

9.1 Physical state (at 20 ºC): solid, elastic material

9.2 Colour: various, depending on the type

9.3 Odor: Odorless or mild odor which disappears in the course of time

9.4 pH Value (at ºC and concentration in %): -

9.5 Melting point (range of temperatures) (ºC): -

9.6 Boiling point (range of temperatures) (ºC): -

9.7 Fire point (ºC): 440

9.8 Flash point (ºC): 270-280°C

9.9 Flammability: standard type T-, HR-, S- a R- –reaction to fire class: F; type CME-, CMS-, CMR- a EASYLAM (fire-retarded) – reaction to fire class F, E

9.10 Self-ignition (pyrophoric properties): -

9.11 Explosion limits: **upper limit (% vol.):** -

lower limit (% vol.): -

9.12 Oxidation properties: -

9.13 Vapour pressure (at ºC): -

9.14 Density (at ºC): -

9.15 Solubility (at ºC):

- **in water:** not soluble
- **in fat (including oil specification):** -

9.16 Partition coefficient n-Octanol / water: -

9.17 Other data (e.g. viscosity, refraction index): calorific power: 29 500 kJ/kg

10. STABILITY AND REACTIVITY

10.1 Conditions under which the product is stable: stable at common conditions

10.2 Conditions to avoid: -

10.3 Substances and minerals to avoid:
May not come into contact with varnish, drying oil and oil painting materials because it could cause the self-ignition.

10.4 Hazardous decomposition products: carbon black, CO, CO_2, gas hydrocarbons

10.5 Other data: -

11. TOXIKOLOGIC INFORMATION ON THE SUBSTANCE / PREPARATION (respectively in the preparation ingredients):

In terms of primary excitability of skin this material has been assessed by Certificate Oeko Tex Standard 100, class 1 as harmless for the health of all age groups even for children up to three years of age.

11.1 Acute toxicity:

- LD_{50}, oral, rat ($mg.kg^{-1}$): -
- LD_{50}, dermal, rat or rabbit ($mg.kg^{-1}$): -
- LC_{50}, inhalation, rat, for aerosols or particles ($mg.1^{-1}/4$ h): -
- LC_{50}, inhalation, rat, for gas and vapours ($mg.1^{-1}/4$ h): -

11.2 Subchronic – chronic toxicity: -

11.3 Irritability: -

11.4 Sensibility: -

11.5 Carcinogenity: -

11.6 Mutagenity: -

11.7 Toxicity for reproduction: -

11.8 Experience relevant to the effect on human health: -

11.9 Tests performed on animals: -

11.10 Other data: -

12. AKUTE TOXICITY FOR WATER ORGANISMS:

12.1

- LC_{50}, 96 hours fish (mg.1^{-1}/4 h): -
- EC_{50}, 48 hours daphnia (mg.1^{-1}/4 h): -
- IC_{50}, 72 hours algae (mg.1^{-1}/4 h): -

12.2 Decomposition:
Not decomposable or decomposes very slowly.

12.3 Other data:
Decomposition products are harmless for the environment.

12.4 CHSK: -

12.5 BSK5: -

12.6 Other data: -

13. DISPOSAL CONSIDERATIONS :

13.1 Disposal methods of the substance / preparation:
Recycling or on municipal waste dump.

13.2 Disposal methods of the contaminated packages:
On municipal waste dump.

13.3 Other data (Waste classification according to the Decree No. 381/2001 Sb., waste code, waste type name, waste category): -

14. TRANSPORT INFORMATION:

The product is harmless for transport.

14.1 Overland transportation (ADR/RID)

Class: - Figure/Letter: - Caution board: - Kemler No.: -
UN No.: - Remark: -

14.2 Inland waterways transport (ADN/ADNR)

Class: - Figure/Letter: - Category: -

UN No.: - Remark: -

14.3 Sea transport (IMDG)

Class: - Page: - UN No.:

Packaging type: - EMS No.: - MFAG: -

Sea contamination substance: -

Technical name: -

Remark: -

14.4. Air transport (ICAO/IATA)

Class: - UN No.: Packaging type:

Technical name: -

Remark: -

15. REGULATORY INFORMATION:

Classification and labelling of the substance / preparation according to the Law No. 350/2011 Sb.:

Hazard symbol: -

Hazardous substances: -

R-phrases (full wording): -

S-phrases (full wording): -

16. OTHER INFORMATION:

This Material Safety Data Sheet was prepared in accordance with the Law No. 350/2011 Sb on chemical substances and chemical preparations and its implementing regulations and amendments. The Safety Data Sheet contains data necessary for the assurance of the safety and health protection during work and for the environment protection. The data provided correspond with our present state of knowledge and experience and are in accordance with valid legal regulations. They cannot be considered as a guarantee of suitability and usability of the product for particular applications.