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## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>PRODUCT NAME:</b>	<b>GUARTOFON® PU 80/10 FR</b> , see Section 16 for applicable type.
<b>PRODUCT DESCRIPTION:</b>	Sound Insulating panels in expanded polyurethane foam (PU) combined with a Heavy-layer, made of polymeric compound with mineral fillers. It can be combined with an aluminum foil on the other side.
<b>PRODUCT CODE:</b>	
<b>INTENDED USE:</b>	Heavy layers panels for sound insulation (eg Piping and ducts) where it serves a very good resistance to fire.
<b>COMPANY IDENTIFICATION:</b>	<b>Guarto Srl</b> <b>A company of the Armacell Group</b> Via Volpiano, 192 10040 - Leini (TO) – ITALIA
<b>EMERGENCY TELEPHONE (office time):</b>	<a href="http://www.guarto.it">www.guarto.it</a> Tel. +39 011 9914583 Tel. +39 011 9961063
<b>e-mail:</b>	<a href="mailto:info.guarto@armacell.com">info.guarto@armacell.com</a>

## 2. HAZARDS IDENTIFICATION

<b>CLASSIFICATION</b>	Classification in compliance with the regulations (EC) N. 1272/2008. This material is not considered to be hazardous according to regulatory guidelines see Section 15.
<b>PHYSICAL / CHEMICAL HAZARDS</b>	Material can accumulate static charges which may cause an electrical discharge.
<b>HEALTH HAZARDS</b>	Material is not hazardous in the form in which it is placed on the market and under the normal and recommended conditions of storage and use.
<b>ELEMENTS OF THE LABEL:</b>	No labelling according to the regulations (EC) N. 1272/2008.
<b>ENVIRONMENT HAZARDS:</b>	Material is stable under normal conditions of storage and use. It is not hazardous to the environment in its normal state.
<b>Note:</b>	This material should not be used for any other purpose than the intended use in Section 1.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

<b>No Reportable Hazardous Substance(s) or Complex Substance(s)</b>
<b>Note:</b> The product can be supplied coupled with these materials that do not contained No Reportable Hazardous Substance(s) or Complex Substance(s): <b>Polyurethane foam (PU):</b> The product is not regarded as having any significant associated hazards. <b>CAS number:</b> 9009-54-5 <b>Reinforced Aluminium Foil:</b> Aluminium and fibreglass net.

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#### 4. FIRST-AID MEASURES

**INHALATION:**

In case of adverse exposure to vapors and/or aerosols formed at elevated temperatures, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest.

**SKIN CONTACT:**

No hazard in normal use.

**EYE CONTACT:**

No hazard in normal use.

Polyurethane foam (PU): Dust particle can cause mechanical irritation. Irrigate with copious amounts of water to remove.

**INGESTION:**

First aid normally not required. Seek medical attention if discomfort occurs.

#### 5. FIRE-FIGHTING MEASURES

**EXTINGUISHING MEDIA:**

**Appropriate Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>), sand to extinguish flame.

**Inappropriate Exstinguishing Media:** Not applicable.

**FIRE-FIGHTING:**

**Fire-Fighting Instructions:** Assure an extended cooling down period to prevent re-ignition. Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.

**Protective Equipment:** Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire-exposed surface and to protect personnel.

**Hazardous Combustion Products:** The product is combustible. Smokes, Fumes, Oxides of carbon and other combustion and products.

**FLAMMABILITY PROPERTIES:**

When exposed to flame, the product burns.

**Flash Point [method]:** N/A

**Flammable Limits** (Approximate volume %in air): LEL:N/D UEL:N/D

**Autoignition Temperature:** N/A

#### 6. ACCIDENTAL RELEASE MEASURES

**NOTIFICATION PROCEDURES:**

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulation.

**SPILL MANAGEMENT:**

**Land Spill:** Treated as solid urban waste.

**Water Spill:** Treated as solid urban waste.

**Note:** Local regulations may prescribe or limit action to be taken, see section 13. Collect mechanically.

**ENVIRONMENTAL PRECAUTIONS:**

Prevent entry into waterways, sewers, basements or confined areas.

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## 7.

### HANDLING AND STORAGE

#### HANDLING:

Avoid elevated temperatures and conditions generating heat during transfer operations. Avoid conditions or places which create dust, sand, rain and snow. Do Not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sun light. Material can accumulate static charges which may cause an electrical spark (ignition source). Care should be taken when storing and handling this product. Apart from the specific nature of the polymer compound, conditions such humidity, sunlight and temperature have influence on the way the product behaves during storage and handling. Special attention should be paid to avoid inappropriate stacking of sheets, rolls or package units. The product may be dimensionally unstable under certain conditions

**Loading/Unloading:** [ Ambient]

**Transport Temperature:** [Ambient]

**Transport Pressure:** [Ambient]

**Static Accumulator:** This material is a static accumulator.

#### STORAGE:

Do not store in open or unlabelled containers. Avoid elevated temperatures and conditions generating heat during storage. Store out of direct sun, in well ventilated, cool and dry place. Use the product within six months. The pallets should not be stacked with each other and to the same overlapping weights.

**Storage Temperature:** [Ambient]

**Storage Pressure:** [Ambient]

**Suitable Containers/Packaging:** Rolls and/or sheets on pallets or boxes of wood, plastic or metal.

**Suitable Materials and Coatings:** Plastic Coatings.

## 8.

### EXPOSURE CONTROLS /PERSONAL PROTECTION

#### EXPOSURE LIMIT VALUE (OCCUPATIONAL):

ACGIH recommends for insoluble and poorly soluble particles not otherwise specified an 8-hour TWA of 10 mg/ m<sup>3</sup> (inhalable particles), 3 mg/ m<sup>3</sup> (respirable particles).

#### ENGINEERING CONTROLS (OCCUPATIONAL):

Not necessary in normal use.

#### RESPIRATORY PROTECTION (PERSONAL):

Not necessary in normal use.

#### HAND PROTECTION (PERSONAL):

Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. See the producer's data.

#### EYE PROTECTION (PERSONAL):

Wear suitable protective glasses.

#### SKIN AND BODY PROTECTION (PERSONAL):

Standard work clothes.

#### ENVIRONMENTAL CONTROLS :

See Sections 6, 7, 12 and 13.

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<b>9. PHYSICAL AND CHEMICAL PROPERTIES</b>
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<b>APPEARANCE (PHYSICAL STATE AT 23°C):</b> <b>COLOUR:</b> <b>ODOUR:</b> <b>RELATIVE DENSITY (AT 23°C):</b> <b>BULK DENSITY (AT 23°C):</b> <b>DENSITY:</b> <b>pH:</b> <b>SOLUBILITY IN WATER (AT 20°C)</b> <b>MELTING RANGE:</b> <b>MELTING POINT:</b> <b>FLAMMABLE LIMIT:</b> <b>AUTOIGNITION TEMPERATURE:</b> <b>FREEZING POINT:</b> <b>CONDUCTIVITY:</b> <b>VISCOSITY:</b>	Solid (sheets or rolls) Black and Dark Gray. Mild source/acid but almost odorless. 1,9 ± 0,10 g/cm <sup>3</sup> (only Heavy layer compound) ; 70 ± 110 g/cm <sup>3</sup> (only PU Foam) N/A 1900 kg/m <sup>3</sup> ÷ 2000 kg/m <sup>3</sup> (only Heavy layer compound) 7/8 (only Heavy layer compound) Negligible / Insoluble N/D N/D N/D N/D N/D N/D N/D N/D
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<b>10. STABILITY AND REACTIVITY</b>
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<p>Material is stable and inert under normal conditions in the recommended storage and handling conditions (See Section 7). Prolonged exposure to temperatures above 150°C may cause compound degradation.</p> <p><b>CONDITIONS TO AVOID:</b>  Avoid elevated temperatures and avoid exposure to sunlight. Accumulation of static charges.</p> <p><b>MATERIALS TO AVOID:</b>  Particular acid solutions, solvents and gasoline.</p> <p><b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>  Material does not decompose at ambient temperatures (See section 5).</p>
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<b>11. TOXICOLOGICAL INFORMATION</b>
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<p>Specific information on the material is not available in the literature. See Section 5, 10.</p> <p><b>DANGEROUS EFFECTS FROM EXPOSURE TO THE MATERIAL:</b>  Material does not present any intrinsic health hazard when processed or handled according to correct working procedures.</p> <p><b>DELAYED AND IMMEDIATE EFFECTS FROM SHORT AND LONG EXPOSURE:</b>  Carcinogenicity, Mutagenicity, Reproductive toxicity: No evidence of these effects has been reported for the product.</p>
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<b>12. ECOLOGICAL INFORMATION</b>
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The information given is based on data available for the material, the composition of the material, and similar materials. See Section 5, 10.

**ECOTOXICITY:**

Material -- Not expected to be harmful to aquatic and terrestrial organisms.

**MOBILITY:**

Material -- Use according to good working practice, and avoid re leasing the product into the environment. The product not float.

**PERSISTENCE AND DEGRADABILITY:**

The compound contains non-biodegradable polymers.

### 13. DISPOSAL CONSIDERATIONS

**DESCRIPTION AND HANDLING OF RESIDUES:**

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time disposal.

**DISPOSAL RECOMENDATIONS:**

Suitable routes of disposal are supervised incineration, preferentially with energy recovery, or appropriate re cycling methods in accordance with applicable regulations and material characteristics at the time of disposal. Landfilling should be avoided as far as possible. If unavoidable, use approved landfill site.

**Recycling:** The only heavy layer compound after suitable treatment (cleaning, grinding, etc.) can be safely re-used, as is or mixed with fresh material, when this is compatible with the intended final application.

**European waste code:** N/D

### 14. TRANSPORT INFORMATION

The material is not regulated and / or classified as dangerous for transportation according to the following regulations: ADR/RID, IMO, IATA.

### 15. REGULATORY INFORMATION

Material is not dangerous as defined by the UE Dangerous Substances/ Preparations Directives. Label not required.

### 16. OTHER INFORMATION

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This Safety Data Sheet has been drawn up according to the requirements of Regulation 1272/2008/EC. Complies with the following national/regional chemical inventory requirements: TSCA, EINECS.

N/A = Not applicable      N/D = Not determined

**NORMS AND LEGISLATIONS ON SPECIFIC HEALTH, SAFETY AND ATMOSPHERE FOR THE SUBSTANCE OR THE MIXTURE:**

**APPLICABLE DIRECTIVES AND ORDER EU:**

1907/2006 (Recording, Appraisal, Authorization and Restrictions for the chemical substances, and next modifications)

1272/2008, Classification and Labelling of substances and mixture and next amendments

**This (M)SDS contains the following revisions:**

Review 03 of the 26/08/2021.

**This (M)SDS covers the following materials:**

GUARTOFON® PU 80/10 ALM N; GUARTOFON® PU 80/10 ALM R.

**WARNINGS:**

THE INFORMATION AND RECOMMENDATION CONTAINED HEREIN ARE, TO THE BEST OF GUARTO SRL 'S KNOWLEDGE AND BELIEF, ACCURATE AND RELIABLE AS OF THE DATE ISSUED. YOU CAN CONTACT GUARTO SRL TO INSURE THAT THIS DOCUMENT IS THE MOST CURRENT AVAILABLE FROM GUARTO SRL. THE INFORMATION AND RECOMMENDATIONS ARE OFFERED FOR THE USER'S CONSIDERATION AND EXAMINATION. IT IS THE USER'S RESPONSIBILITY TO SATISFY ITSELF THAT THE PRODUCT IS SUITABLE FOR THE INTENDED USE. IF BUYER REPACKAGES THIS PRODUCT IT IS THE USER'S RESPONSIBILITY TO INSURE PROPER HEALTH, SAFETY AND OTHER NECESSARY INFORMATION IS INCLUDED WITH AND/OR THE CONTAINER. APPROPRIATE WARNINGS AND SAFE-HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS. ALTERATION OF THIS DOCUMENT IS STRICTLY PROHIBITED. EXCEPT TO THE EXTENT REQUIRED BY LAW, REPUBLICATION OR RETRANSMISSION OF THIS DOCUMENT, THE WHOLE OR IN PART, IS NOT PERMITTED.