1. Identification of material/ final uses/ company

1.1. Commercial name
RADIFLOOR 66: BCF POLYAMIDE 66 YARN (RAW, WHITE, SOLUTION DYED, SPACE DYED)

1.2. Final Uses
REACH regulation consider the product an article.
Yarn uses:
- Residential and contract carpeting
- Automotive carpeting
- Automotive interior
- Home upholstery
- Quilting
- Ropes and bristles

1.3. Producer’s Information
RADICIFIL S.p.A.
Production Plant: Casnigo (BG) - Via Europa, 41 CAP: 24020

1.4. Emergency telephone numbers/ E-mail responsible for MSDS
Tel +39 035 736000
Fax +39 035 736310

Andrea Visciglio
e-mail andrea.visciglio@radicigroup.com
tel 0039 035 736000
fax 0039 035 736310

2. Hazards Identification
The product, commercialised as a continuos multifilament yarn (different dtex), packaging on suitable spools:
- is not classified as dangerous in accordance with Directives 67/548/EEC and 1999/45/EC and 1272/2008 CLP.
- It is not, and does not contain PBT’s or vPvB (Annex XIII Regulation 1907/2006/CE)
- It is not included in Annex XIV or in the “Candidate List”.
- Do not have a Community exposure limit.

EC Regulation 1272/2008 CLP: substance is not classified.
Label elements: labeling is not necessary according to the Regulation CE1272/2008 and GHS criteria.

2.1. More
The product in case of fire or hot work may undergo thermal decomposition or combustion, could be produce some traces of:
- toxic gases: carbon oxides, nitric oxides, hydrocyanic acids, acrylonitrile, and formic aldehyde.
3. Composition/information on ingredients

The product does not need classification according the norm 1999/45/CE, and Regulation 1907/2006/CE

3.1. Chemical Nature

<table>
<thead>
<tr>
<th>Chemical name of polymer</th>
<th>POLYAMIDE 66 RADIPOL A &gt; 99%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>NYLON 66 - PA66</td>
</tr>
<tr>
<td>Chemical Formula</td>
<td>-(NH-(CH₂)₆-NHCO-(CH₂)₆–CO-)ₙ</td>
</tr>
<tr>
<td>CAS Number</td>
<td>32131-17-2</td>
</tr>
</tbody>
</table>

Other Components

| Master Opacifier TiO₂       | < 0,5%                             |
| Spin finish                | Antistatic Lubricant < 1%          |

3.2. Hazards Ingredients

No hazards ingredients are included.

4. First aid measures

In case of unusual events like fire and/or overheating (temperature >300°C) the following treatments are necessary:

| Eye contact:               | in case of contact with powders, or little pieces of filament, wash them rapidly and plentifully with water opening them. Hospital treatment is recommended. |
| Skin contact:              | in case of contact with melted material, cool it quickly with water and do not attempt to remove. Hospital treatment is recommended. |
| Inhalation:                | in case of accidental inhalation of the steams developed by combustion, move to fresh air, in case of considerable exposure, hospital treatment is recommended. |
| Ingestion:                 | the product is not dangerous after ingestion, in case of vomiting a hospital treatment is recommended. |

5. Fire-fighting measures

The fire risk is very low, but it is forbidden to make working with open flames or hot objects.

5.1. Extinguishing media

In case of fire the extinguishing media are: nebulized water, foam, carbon dioxide (CO2), dried powder.

5.2. Specific hazards

The dust produced during the handling and the storage can produce an explosive mix with air. Large molten masses may ignite spontaneously in air.
At temperatures >300°C toxic substances can be emitted: carbon oxides, nitrogen oxides, CO2, hydrocyanic acid, ammonium cyanide. Formation of further decomposition and oxidation products depends upon the fire condition.

Beware of static electricity and discharge.

5.3. Special protective equipment

In the event of fire, it is necessary to wear gloves, boots, body protection, helmet, breathing apparatus: full face masks with air purifying respirator for dust and particles, filters for gas and antismoke (A-B-E-K).

5.4. Further information

Collected contaminated fire extinguishing water, and get rid them in a proper treatment plant.

Cooling with nebulized water other products close to the fire.

Evacuate personnel not equipped and/or not in charge to safe area.

6. Accidental release measures

No special safety risk in case of accidental dispersion/spill. Collect all the material for controlled re-use.

Consider the increase of volume in case of shed yarn.

7. Handling and storage

Keep the product in his packaging. The packages must be handled in order to do not break the packaging: in case of breaks, product’s alterations are possible. Keep the product in a cool warehouse.

Keep the product under shelter to avoid from the moisture, and rays of sunlight.

Arrange in the best way the pallets to avoid falls, packaging distortion and crossings.

Provide for appropriate exhaust ventilation and dust collection on heat setting operation.

Beware of static electricity and discharge.

At temperatures >300°C can be emitted toxic substances does not breath gas and vapours.

8. Exposure controls/Personal protection

Particular precautions and protected equipment are not required in normal industrial uses.

In case of dust presence and/or overheated conditions:

<table>
<thead>
<tr>
<th>Protection</th>
<th>Equipment/Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye protection:</td>
<td>safety glasses with side-shields</td>
</tr>
<tr>
<td>Hand protection:</td>
<td>leather gloves, warm gloves</td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>masks (full face mask) with filters against: solid, particles, gases and vapours</td>
</tr>
<tr>
<td>Body protection:</td>
<td>safety boots, helmets, protective clothing (form dust and warm)</td>
</tr>
<tr>
<td>Collective protection</td>
<td>emergency shower, eye-washing</td>
</tr>
</tbody>
</table>

When using yarn, do not eat, drink, and smoke. Wash hand before breaks and at the end of workday.
9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Multifilament yarn</td>
</tr>
<tr>
<td>Colour</td>
<td>Neutral, white</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>Boiling temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>400°C</td>
</tr>
<tr>
<td>Melting point temperature</td>
<td>260°C</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>&gt; 300°C</td>
</tr>
<tr>
<td>Heat of combustion</td>
<td>7150 Kcal/Kg</td>
</tr>
<tr>
<td>Density at 20°C</td>
<td>1.14 Kg/dm3</td>
</tr>
<tr>
<td>Bulk density</td>
<td>0.35-0.45 Kg/dm3</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Non soluble</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

The product is stable, can be kept indefinitely in the undamaged bags. During following processing avoid: temperatures > 200°C, direct flame and sparks. At temperatures >300°C toxic substances can be emitted: carbon oxides, nitrogen oxides, CO2, hydrocyanic acid, ammonium cyanide. Formation of further decomposition and oxidation products depends upon the fire condition. Avoid strong and oxidising agents.

11. Toxicological information

The product is not toxic, is inert, and has no known adverse affect on human health. This does not exclude the possibility of individual allergies.

12. Ecological Information

- Persistence and degradability: the product is inert and non-degradable
- It is not harmful to aquatic organisms
- Risk of accumulation: there is no risk of accumulation
- It is not bioavailable
- No negative ecological effects

13. Disposal consideration

The yarn remains unaltered for a long time. It can be totally recycled using the appropriate technologies. The polyamide waste can be valorised, it can be sold to authorised firm for the recycling, or thermo-recycling. Contaminated packaging must be completely emptied, and recycled too.
14. Transport information

The product does not need to be labelled according to ECC directive n.68/548, since it is non-classified as dangerous.

<table>
<thead>
<tr>
<th>Type of Transport</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land transport</td>
<td>ADR non classified dangerous good; RID non classified dangerous good</td>
</tr>
<tr>
<td>Inland waterway transport</td>
<td>ADNR non classified dangerous good</td>
</tr>
<tr>
<td>Sea transport</td>
<td>IMDG non classified dangerous good</td>
</tr>
<tr>
<td>Air transport</td>
<td>IATA/ICAO non classified dangerous good</td>
</tr>
</tbody>
</table>

15. Regulatory information

/ European Regulations:
Regulation 1907/2006/EC; 1271/2008, 453/2010

Chemical Safety Assessment (CSA) is not applicable.

15. Others Information

The data and informations on that sheet, coming from qualified source, are reliable and correct at the data of issue of this document.
RADICI FIL S.p.A. can not be held responsible for their accuracy nor the consequences that may arise from the use of such information.
The safety profile is only used to describe the products for safety.
RADICI FIL S.p.A. notify customers in advance of any changes to the composition of the product.
Information is non the meaning of quality assurance.
The informations given is designed only as a guidance for safe and is not being considered a warranty or a quality specification.

/ Stroke on the left side shows the new modifications.